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YEAR BOOK

...OF THE...

Ayrshire Breeders

...FOR...

❧ ❧ 1900 ❧ ❧

ISSUED BY THE

Ayrshire Breeders' Association.

BRANDON, VT.
BRANDON PUBLISHING COMPANY.
1900.

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PROCEEDINGS.

The twenty-fifth annual meeting of the Ayrshire Breeders' Association was held January 24th, 1900, in the parlor of the United States Hotel, Boston, Mass., in response to call of the secretary and was called to order by the president, L. S. Drew, at 2 p. m.

The roll call was responded to by the following members in person :

Brown, Obadiah	Clark, Franklin P.
Drew, L. S.	Ennis, Alfred A.
Fletcher, Geo. A.	Fletcher, Etna J.
French, J. D. W.	Garvin, W. R.
Hayes, Charles H.	Hayes, Charles S.
Hazard, Isaac	Joslin, H. S.
Leach, Philo	Magie, J. O.
Piper, Anson C.	Sage, Charles D.
Smith, Daniel A.	Wells, S. M.
Winslow, C. M.	Winsor, Nicholas S.
Yeaton, Geo. H.	

The following members responded by proxy :

Arnold, Geo. W.	Ayer, H. S.
Babcock, F. M.	Bacon, P. K.
Barnes, N.	Bement, George
Blodgett, H. W.	Blodgett, J. W.
Bowker, Geo. H.	Bowen, Edward S.
Boynton, C. H.	Butterfield, Jerome F.
Byrne, Christopher	Casterline, J. Andrew
Cloud, James & Son	Coldron, J. N.
Converse, J. F.	Cookingham, H. W.
Cornell, F. P.	Curtis, L. W.
Drummond, James	Dorn, Elmer J.

Foote, T. L.	Foss, J. M.
Gold, T. S.	Hall, Lott
Harrington, H. A.	Hunt, A. W.
Irving, Thomas	Jackson, Ward R.
Krebs, J. DeWitt	Larned, J. H.
Norton, W. H.	Peck, C. L.
Peck, Cassius	Pierce, Geo. H.
Perley, Charles	Proctor, Fletcher D.
Reeves C. Mc	Scott, John W.
Scribner, G. S.	Sears, B. C.
Shimer, B. Luther	Smith, E. A.
Smith, Oliver	Smith, Peter D.
Spalding, L. C.	Stevens, Wm. Stanford
Stowell, L. D.	Surget, James
Tschudy, Fred	Tubbs, Ambie S.
Underhill, C. S.	Viner, Wm.
Watson, H. R. C.	Wells, Dudley
Whitney, C. P.	

The following breeders of Ayrshire cattle, not members of the Association, were present :

Samuel G. Copeland, West Bridgewater, Mass.
 B. F. Barnes, Haverhill, Mass.
 W. I. Bartholomew, Putnam, Conn.
 John T. Wade, Taunton, Mass.
 Aaron Gay, Stoughton, Mass.
 Davis Copeland, Campello, Mass.
 F. C. Pierce, Concord, Mass.
 Thomas A. Lillibridge, Norwood, Mass.
 Benjamin F. Davis, South Lee, N. H.
 Leonard H. Kimball, Haverhill, Mass.
 Harry B. Carter, North Barrington, N. H.
 Frank T. Moore, West Peabody, Mass.
 Chauncey Gleason, Haverhill, Mass.
 E. E. Sawyer, Atkinson, N. H.

SECRETARY'S REPORT.

It is with feelings of sadness that I have to record the loss of our treasurer, Mr. Henry E. Smith, who died this last fall. He was a man that commanded our respect for his strict integrity and care in business, and acquaintances found him a genial and true friend, and we, who knew him well, shall miss him. I have a notice here I would like to read from the Providence Journal, and after that to move that a committee be appointed by the chair consisting of two, who shall draft proper resolutions in regard to Mr. Smith's death. The secretary read the following :

HENRY E. SMITH, DIED SEPT. 23d, 1899.

IN MEMORIAM.

Whereas, it has pleased the Great Ruler over all in whom we live and have our being to call Henry E. Smith, our friend, fellow citizen, director and president to the Divine Beyond, we hereby desire to express our esteem and appreciation for him as a man, citizen and officer of the bank, and to commemorate the pleasant memories of our associations with him by recording this testimonial in the records of the National Exchange bank and publishing the same in the Providence Daily Journal and the Pascoag Herald.

We also, as a Board of Directors, hereby extend to the family and relatives of the deceased our sympathy and condolence in their unexpected bereavement.

N. S. WINSOR,	} Committee
A. P. MOWRY,	
M. I. MOWRY,	

THE PRESIDENT—I appoint Obediah Brown and Mr. French to draw up those resolutions.

The membership of the Association has been increased by the addition of the following :

Geo. Davidson, Fairfax, P. Q.

Edward Kemp, New York.

E. A. Schouten, Cortland, N. Y.

John W. Scott, Austin, Minn.

William Jay, Katonah, N. Y.

Franklin Doane, Middletown, N. Y.

N. E. Sears, Elmwood, Conn.

Howard Cook, Beloit, Ohio.

George E. Pike, Gouverneur, N. Y.

Ira W. Jones, Alfred, N. Y.

Elmer J. Dorn, Johnstown, N. Y.

Beside the death of our treasurer I have had only the death of Henry Thorp, Charlotte, Vt., reported.

Volume XII is printed and about 1,000 animals already recorded for Volume XIII. The plan of issuing an attractive year book has proved a success, and has done much good I believe. For 1898 we issued 500 which proved not enough, so in 1899 we issued 1,000 copies and they are all gone. I know of no way we can scatter information for so little money as in the issue of an attractive year book, but the trouble is to obtain good photographs and records of the dairy yield of Ayrshire cows.

We have a good many photographs sent us, and they look as though the cows were good ones, and if the artist had known how to pose her he could have taken a desirable picture. It needs a large photograph to get a good half-tone, also the cow should stand in a graceful position. A side view, a little to the rear and on a level is the best.

I cannot understand why it should be so difficult to obtain reliable milk and butter records, and it seems strange that when the Association offers such inducements to breeders to test their cows that so few avail themselves of this opportunity, for there is nothing that attracts buyers like a milk and butter record and it is not necessary that it should show wonderful cows.

I think Mr. Drew and Mr. Yeaton would both tell you that the records of their herd which they have published have been the direct means of bringing them

many customers, and I believe the fact of their being sold short always is largely due to the printed records of their cows.

A good many Ayrshires have been brought in from Canada the past year and one importation from Scotland. This herd, numbering about a dozen, was brought over by Mr. John R. Valentine of Bryn Mawr, Pa. I saw them when in quarantine at Garfield, N. J., and they looked like strong constitutional cows and a good type of the Scotch-bred cows. They were all of them dry and looked to be heavy in calf. I also saw a good many in Canada that had been recently imported and most of those had the same appearance of the Scotch type. Some of the Canadians promised to make tests and records of their imported cows and send them to me, but as yet I have not received any. There seems to be a good deal of inquiry for Ayrshires and some sales, especially to go west. I lately shipped a carload to Santa Barbara, Cal., about half of them being bulls, and most of them consigned to parties who want them to cross on Jersey cows.

Mr. Henry Wade of Toronto is trying to consolidate the Canada herd-books under one head at Toronto and cut out everything that does not trace to importation. His efforts are meeting with success, and his late volumes are recording only such cattle as have a clear pedigree tracing to importation.

The States are Canada's best market and she wishes to place her herd-book on a similar footing with ours to inspire confidence and attract buyers.

REPORT OF FAIR-GROUND TEST, 1899.

In accordance with the vote of the Association, at its annual meeting, held February 1, 1899, your committee issued the following circular:

SECRETARY'S OFFICE,
 AYRSHIRE BREEDERS' ASSOCIATION,
 BRANDON, VT., February 15, 1899.

The Ayrshire Breeders' Association offers a special premium for the season of 1899 of \$25.00—\$15.00 to first and \$10.00 to second—to the two Ayrshire cows, registered in the Ayrshire Record, that shall score the highest from one day's milking on your Fair Ground at the time of holding your Fair, the butter fat, not to fall below 3.70 per cent. butter fat as determined by the Babcock test, and the award to be decided by the following

SCALE OF POINTS:

For each 20 days since calving,	-	-	1 point.
For each 15 days of gestation,	-	-	1 "
For each pound of milk in 24 hours,	-	-	1 "
For each pound of butter fat in 24 hours,	-	-	20 points.

Provided, however, that your Fair Association will offer a like amount, making the whole premium offered amount to \$30.00 to first and \$20.00 to second, and that your Fair Association take the full charge of the testing, and return a full official report of the test to the Secretary of the Ayrshire Breeders' Association.

C. M. WINSLOW, Secretary.

Which was sent on March 5th to the

Illinois State Fair.

Maine " "

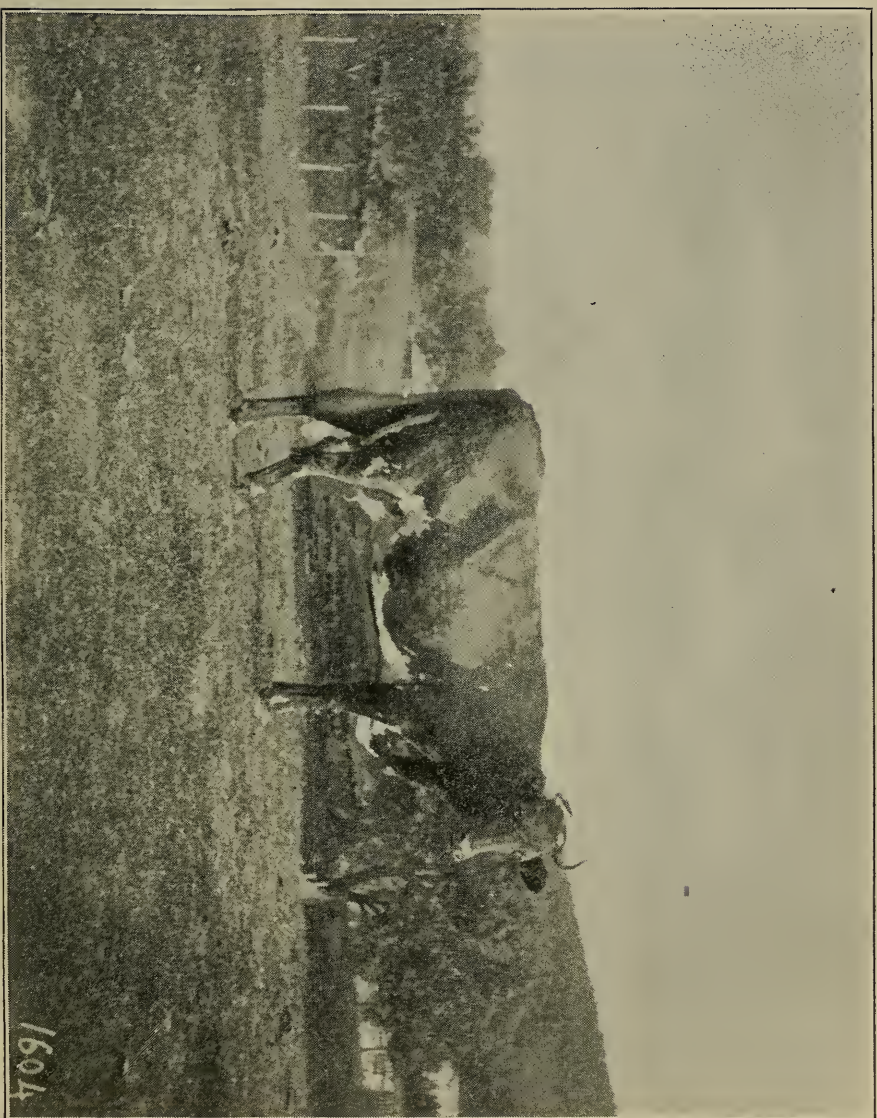
New England Fair.

New Hampshire Grange Fair.

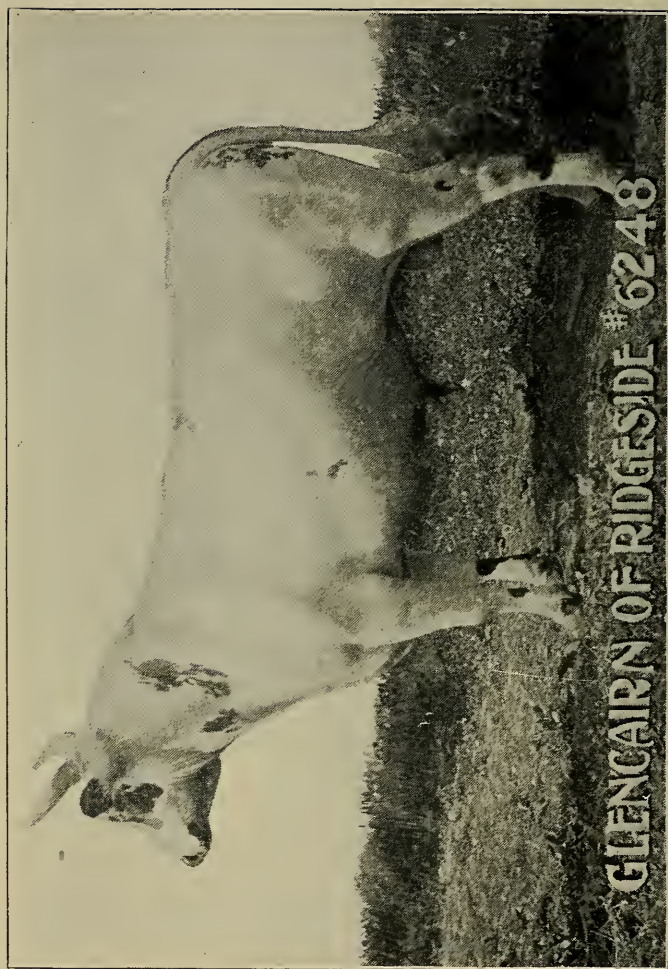
New Jersey State Fair.

New York " "

Ohio " "



Ruby of Boxford, 13363.



Pennsylvania State Fair.

Rhode Island " "

St. Louis Fair, St. Louis, Mo.

and later to the

Valley Fair, Brattleboro, Vt.

Cambridge Fair, Cambridge, N. Y.

The Rhode Island, St. Louis, Valley and Cambridge fairs accepted.

At the Rhode Island fair Mr. S. M. Wells entered two cows, both of which fell below qualifying standard for one milking, but the second milking of one was sufficiently high to allow the average of the two milkings to stand at 3.75 per cent., and the Rhode Island fair waits instructions as to whether the wording not to fall below 3.70 per cent. means for either milking or for the average of the two.

At the Cambridge fair cows were entered by L. C. Spalding & Son and by E. H. & C. S. Barney, and I am informed that a cow of Mr. Barney's averaged over 3.70, but that all the cows fell below 3.70 at one milking, and that the Fair Association ruled that all cows were disqualified.

The St. Louis fair were to offer the special, but as they have not reported results we are unable to say what was done.

At the Valley Fair Rose Clovis won first and Rose Clenna second, both owned by C. M. Winslow & Son. Rose Clovis showed 4.65 per cent. of butter fat.

Rose Clenna " 4.12 " "

Your committee would suggest that if it is thought best to continue the fair ground tests that the Association state whether both milkings shall reach 3.70 per cent., or whether the average of the two shall reach 3.70 per cent., also that no cow shall be entitled to a premium making less than $1\frac{1}{4}$ pounds of butter, figured on a basis of adding one-sixth to the result of multiply-

ing the pounds of milk given by the per cent. of butter fat, this being the Experiment Station standard.

J. D. W. FRENCH, } Committee on
C. M. WINSLOW, } Dairy Tests.

It was voted to construe the Rhode Island fair test of Mr. Wells' cow to be the average of the two milkings and award him first prize on the cow that averaged 3.75 per cent. butter fat.

HOME DAIRY TEST.

REPORT OF COMMITTEE.

For some years your committee on dairy tests has been trying in every way to obtain reliable statistics of the dairy yield of Ayrshire cows, but with little comparative success. They have urged the breeders to test their cows. They have devised ways in which it would be no expense to the owners of cows, and last year the Association offered \$100 in prizes in addition to paying all the expense of the test, and still we are unable to report any but the same old herds.

Your committee prepared the following circular and sent to every owner of five or more Ayrshire cows, as we believe, in the United States, and four herds responded as follows :

Geo. H. Yeaton, Dover, N. H.

C. H. Hayes & Sons, Portsmouth, N. H.

L. S. Drew, South Burlington, Vt.

C. M. Winslow & Son, Brandon, Vt.

AYRSHIRE BREEDERS' ASSOCIATION.

HOME DAIRY TEST, 1899.

For several years the officers of the Ayrshire Breeders' Association have been trying to obtain reliable records of the dairy ability of the Ayrshire cow. While the response has not been general it has been sufficient to demonstrate the fact that the Ayrshire cow is natu-

rally a dairy cow of great ability, both in the production of butter and milk, and that it only needs a little attention on the part of her owners to ascertain by test which are the profitable cows, and having found them, to breed judiciously, and the Ayrshire cow will take rank with the best dairy breeds of the world, if not at the head of all.

The Association, for the purpose of making a still further attempt to obtain statistics, voted at its last annual meeting to authorize the "Dairy Committee" to conduct a Home Dairy test for seven consecutive days to obtain a week's record of quantity of milk, per cent. butter fat, per cent. total solids and pounds of marketable butter with the cost of butter per pound, and voted to offer three prizes for the largest amount of butter obtained in seven consecutive days from a herd of five cows, \$50 to the first, \$30 to the second and \$20 to the third.

RULES OF TEST.

Herds of cows will be tested for individual records. Any breeder of Ayrshires may enter a herd of cows, which shall at the time of notice of entry stand on the books of the Association as owned by him. He shall in giving notice of entry, furnish the secretary with a full list of the cows he proposes to have tested, giving name and herd-book number and stating the time when he would prefer the test to be made. He may name as many of his cows for the test as he chooses and may have as many of those named tested as he chooses, but no notice of entry will be accepted after December 1, 1899. The time of having the test made is optional with the owner, but notice must be given the secretary at least one month previous, that arrangements may be made for the test. The owner need not name the individual cows he enters for the herd prize, until after the test of the herd has been made. He may also have as

many tests, of cows named in the notice, made during the year as he desires, but shall give notice to the secretary of each test he proposes to have made and shall himself employ and pay the agent for all tests after the first test made by the Association, as the Association will pay for only one visit of the agent, and he shall employ the same agent the Association employed for the first test. In making his selection of the five cows for the herd, he may select any cow that was in the test made by the Association or by himself under the direction of the Association, as above stated. He shall in making the final entry, fill out a blank furnished by the secretary, giving name and number of each cow, her age and weight, the number of calves she has produced, the date of birth of last calf, and date of last service by bull since last calf was dropped. A statement, as accurate as possible, is requested of the method of feeding and care for at least two weeks previous to test, and during the seven days of the test a statement of the exact amount of food given each cow with its local market cost. If the cows are in pasture, give the local price per week for such pasturing and an exact account of any other food given. Also state the local price paid for butter. The object is to obtain the cost of the butter, but in awarding the prize it is for the largest quantity regardless of cost.

The tests will be made as far as possible by agents from the Experiment Station, or some other disinterested and competent persons, who will see the cows milked clean twelve hours previous to the beginning of the test, and will weigh and test the milk of each cow at each milking during the test, or he may test from a composite sample, being left optional and governed by the necessities of the case, but if he shall make a composite sample he shall place a seal on each jar of milk each time after adding milk to the composite sample in the

jar and take such other care of samples as shall ensure freedom from suspicion of its having been tampered with. The test shall be made by the "Babcock Tester" and the "Quevenne Lactometer," and the quantity of marketable butter shall be calculated by the addition of one-sixth to the butter fat.

It will be expected that persons entering herds for the Home Dairy Test will entertain the agent while making the test, free of charge, and give him every facility for carrying on test.

J. D. W. FRENCH, North Andover, Mass.,
C. M. WINSLOW, Sec'y, Brandon, Vt.,
Committee on Dairy Tests.

GEORGE H. YEATON.

I wish to enter the following herd of five cows, for the prize offered by the Ayrshire Breeders' Association for the "Home Dairy Test" for 1899:

Name	No.	Age	Weight	No. of calves	Date of birth of last calf	Date of last bull service since calving
Lady Fox,	9669	13	975	11	Mar. 30, '99	
Annie Bert,	9670	12	900	10	April 23, '99	
Lukolela,	12357	6	1000	4	May 2, '99	
Xoa,	11469	8	950	5	Jan. 3, '99	Feb. 16, '99
Iona S,	12350	7	950	4	Jan. 28, '99	May 7, '99

(Signed) GEO. H. YEATON.

NEW HAMPSHIRE COLLEGE OF AGRICULTURE AND THE MECHANIC ARTS.

AGRICULTURAL EXPERIMENT STATION.

Durham, N. H., Dec. 2, 1899.

Results of the test of the Ayrshire herd owned by George H. Yeaton, Rollinsford, N. H., conducted by Mr. Arthur Given and Mr. C. H. Waterhouse, May 15 to 21 inclusive:

Cow	Lbs. milk	Per cent. solids	Per cent. fat	Lbs. fat	Lbs. butter
Lukolela,	428.5	12.4	3.8	16.27	18.98
Annie Bert,	333.2	12.0	4.2	13.98	16.31
Lady Fox,	334.3	11.9	3.7	12.32	14.37
Iona S.,	247.8	11.7	4.5	11.16	13.02
Xoa,	282.4	12.1	3.8	10.72	12.41
	<u>1626.2</u>	<u>12.</u>	<u>4.</u>	<u>64.45</u>	<u>75.09</u>

FRED W. MORSE, Vice-Director.

SUMMARY.

Five cows, 1626.2 milk, 12 per cent. total solids,* 4 per cent. fat, 75.09 butter.

FEED PER COW FOR SEVEN DAYS.

30 lbs. hay per day at \$12 per ton,	\$1.26
8 lbs. mixed feed per day at \$18 per ton,	50.4
8 lbs. gluten feed per day at \$18 per ton,	50.4
4 lbs. cotton seed meal per day at \$25 per ton,	35.
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Seven days' feed for five cows, \$13.09.0
Cost per pound butter, 17.42 cents.

FEED BEFORE THE TEST.

30 lbs. hay per day at \$12 per ton,	\$1.26
5 lbs. mixed feed per day at \$18 per ton,	.45
5 lbs. gluten feed per day at \$18 per ton,	.45
2½ lbs. cotton seed per day at \$25 per ton,	.22
	<hr/>
	\$2.38
	5
	<hr/>
	11.90

CHARLES H. HAYES & SONS.

I wish to enter the following herd of five cows, for the prize offered by the Ayrshire Breeders' Association for the "Home Dairy Test" for 1899 :

Name	No.	Age	W'ght	No. of calves	Date of birth of last calf	Date of last bull service since calving
Lady Marcia,	11111	9	1200	6	Mar. 19, '99	
Hersa,	11204	8	1000	7	Mar. 28, '99	
Cromona,	11436	8	1000	6	April 20, '99	
Cherry Blossom,	12389	5	1100	4	Mar. 18, '99	
Lady Briarwood,	11434	8	1200	6	Feb. 22, '99	May 5, '99

(Signed) C. H. HAYES & SONS.

NEW HAMPSHIRE COLLEGE OF AGRICULTURE AND THE
MECHANIC ARTS.

AGRICULTURAL EXPERIMENT STATION.

Durham, N. H., Jan. 10, 1900.

Results of the test of the Ayrshire herd belonging to C. H. Hayes & Sons, Portsmouth, N. H., May 2 to 8, 1899:

Name	Lbs. milk	Per cent. solids	Per cent. fat	Lbs. butter
Lady Marcia,	381¼	12.0	3.3	14.67
Hersa,	295½	11.7	3.7	12.78
Cromona,	272¾	12.2	4.	12.74

Name	Lbs. milk	Per cent. solids	Per cent. fat	Lbs. butter
Cherry Blossom,	290½	11.25	3.4	11.65
Briarwood,	276¾	11.8	3.6	11.63
	<u>1516¾</u>	<u>11.79</u>	<u>3.6</u>	<u>63.47</u>

The tests were conducted and analyses made by Messrs. C. H. Waterhouse and Arthur Given.

FRED W. MORSE, Vice-Director.

SUMMARY.

Five cows, 15.16¾ pounds of milk, 11.79 per cent. total solids, 3.6 per cent. fat, 63.47 pounds butter.

COST OF FEED PER COW.

15 lbs. of hay at \$8 per ton,	.06
15 lbs. ensilage at \$2.50 per ton,	.017½
15 lbs. beets at \$4 a ton,	.03
15 lbs. brewer's grains at .05 per bushel,	.01¼
8 lbs. grain mixed at \$20 per ton,	.08
Cost of feed for five cows for seven days,	<u>\$7.04</u>
Cost per cow, 20⅛ cents.	
Cost of one pound butter, 11.09 cents.	

L. S. DREW.

I wish to enter the following herd of five cows for the prize offered by the Ayrshire Breeders' Association for the "Home Dairy Test" for 1899:

Name	No.	Age	Estimated weight	No. of calves	Date of birth of last calf
Nett 3d,	12647	6	1000	4	Mar. 27, '99
Miss Edna,	13218	4	1000	2	April 24, '99
Sadie Tascott,	11483	8	1000	6	April 30, '99
Miss Ollie,	12039	6	1000	4	Oct. 18, '98
Lady Sears,	12641	6	1000	4	April 12, '99

(Signed) L. S. DREW.

TEST OF HERD OF MR. L. S. DREW.

May 9-15, 1899.

Name	Lbs. of milk	Per cent. total solids	Per cent. fat	Lbs. of fat plus 1-6	Lbs. butter
Nett 3d,	312.5	12.87	3.90	12.20	14.23
Miss Edna,	272.5	12.93	4.01	10.94	12.76
Sadie Tascott,	292.5	12.73	3.68	10.77	12.56
Miss Ollie,	208.5	14.05	4.76	9.93	11.58
Lady Sears,	271.0	12.40	3.63	9.83	11.47
	<u>1357.0</u>	<u>13.</u>	<u>4.</u>	<u>53.67</u>	<u>62.60</u>

Correct, JOSEPH HILLS,
Director Vermont Experiment Station.

SUMMARY.

Five cows, 1357 pounds milk, 13 per cent. total solids, 4 per cent. fat, 62.60 pounds butter.

FEED.

36 lbs. hay per day at \$8 per ton,	1 0008
1½ lbs. gluten meal per day at \$22 per ton,	.1155
22 ozs. bran per day at \$18 per ton,	.09

Food for one cow one week,	1.2063
	5

Food for five cows one week,	\$6.0315
Cost of butter per pound, .0964.	

C. M. WINSLOW & SON.

I wish to enter the following herd of five cows for the prize offered by the Ayrshire Breeders' Association for the "Home Dairy Test" for 1899:

Name	No.	Age	weight	Est. No. of calves	Date of birth of last calf	Date of last bull service since calving
Rose Sultana,	12072	6	1050	4	Aug. 22, '99	Sept. 16, '99
Rose Allie,	11154	7	950	5	Oct. 30, '99	Nov. 15, '99
Rose Cleon,	11143	8	1050	6	Oct. 29, '99	Jan. 1, '00
Rose Deruth,	10346	9	1050	7	Sept. 2, '99	Oct. 10, '99
Thoretta,	10258	12	1050		Oct. 30, '99	Dec. 22, '99

(Signed) C. M. WINSLOW.

TEST OF HERD

of C. M. Winslow & Son, conducted under the direction of the Vermont Experiment Station.

J. L. HILLS, Director.

Name,	Lbs. of milk	Per cent. total solids	Per cent. fat	Lbs. butter fat	Lbs. butter fat plus 1-6
Rose Sultana,	295.5	12.15	3.73	11.02	12.86
Rose Allie,	250.8	13.14	4.33	10.86	12.67
Rose Cleon,	210.3	13.17	4.19	8.81	10.28
Rose Deruth,	229.5	12.51	3.75	8.61	10.05
Thoretta,	223.8	12.49	3.60	8.06	9.40
	1209.9	12.69	3.92	47.36	55.26

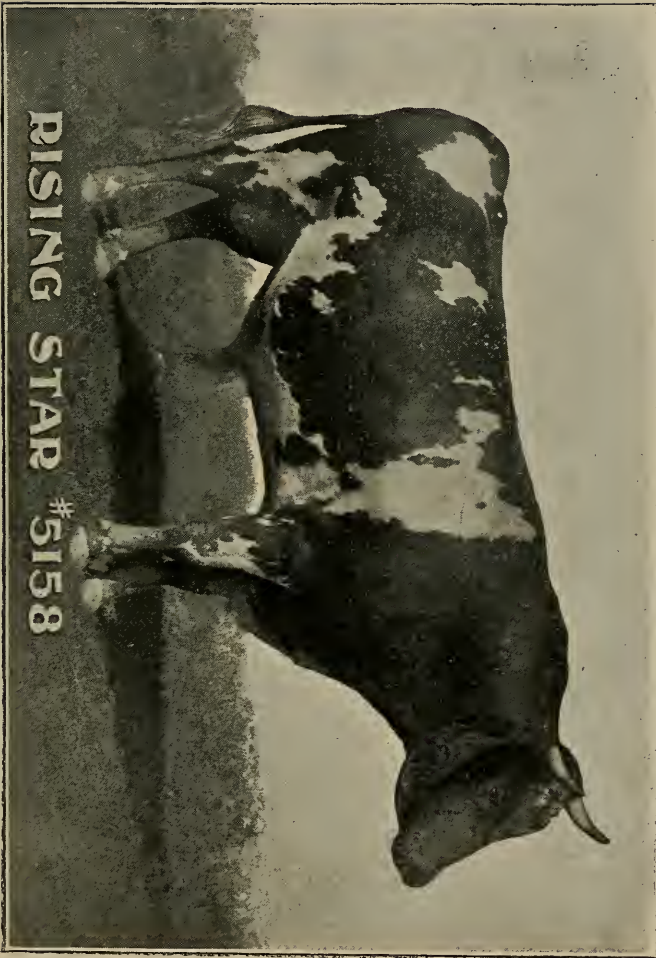
SUMMARY.

Five cows, 1210 pounds milk, 12.69 per cent. total solids, 3.92 per cent. fat, 55.26 pounds butter.

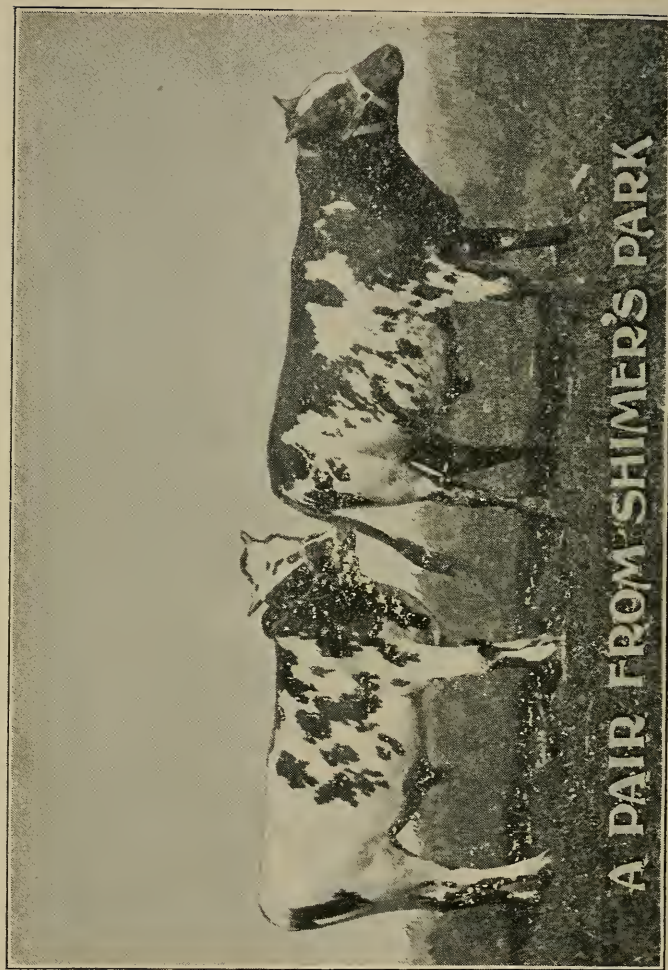
FEED FOR ONE COW SEVEN DAYS.

40 lbs. hay per day at \$8 per ton,	\$1.12
4 lbs. bran per day at \$16 per ton,	.22
2 lbs. corn meal per day at \$18 per ton,	126
	\$1.46.6
	5

Cost of feed for five cows seven days,	\$7.33.0
Cost of butter, 13¼c. per pound.	



RISING STAR #5158



A PAIR FROM SHIMER'S PARK

THE SECRETARY—At the meeting of the Executive Committee, held this morning, it was voted to recommend the continuation of both the Fair Ground and Home Dairy tests, with the same appropriation as last year, also to accept the recommendations of the committee on tests for the changes voted in the rules of the test. It seemed to the Executive Committee that while the response from the breeders and owners of Ayrshires was surprisingly few that it all the more behooved the Association to do all they could to encourage and urge upon the breeders of Ayrshires the advantage of these official tests, in that it now and then gave valuable statistics for the breed, and encouraged the breeder to improve his herd by knowing which were the best cows in his own herd, and where to go for stock with which to build up and improve in dairy lines. While the announcement that a cow has won the blue ribbon in the ring may be gratifying, it really means but little, for she may have been the best type of an Ayrshire cow in the ring, and she may not, but to win the prize in a dairy test means just what it purports to be, for the tests are conducted by competent and disinterested parties and the verdict means something.

MR. HAYES—I move the acceptance of the report and the dairy tests be continued with the same appropriation.

The motion was seconded and unanimously adopted.

THE PRESIDENT—A motion is made to appoint the same committee as last year. Those in favor make it manifest by saying aye.

Unanimous vote.)

THE PRESIDENT—Listen to a report of the committee appointed to draft resolutions in regard to Mr. Smith's death which will be read by the secretary :

Whereas, it has pleased our Heavenly Father in His wise Providence to remove from our midst our late

treasurer, Henry E. Smith, we hereby desire to express our esteem of his sterling qualities, as a friend and brother member, and also our keen sense of appreciation of his long and faithful service of thirteen years as Treasurer of the Ayrshire Breeders' Association.

We desire that a copy of these resolutions be placed on record and that they be sent to his family to whom we extend our sincere sympathy in their great bereavement.

MR. MAGIE—Mr. President: I think we, as an Association, do not fully realize what we have lost in the death of Mr. Smith. Having been one of the committee to examine his accounts for some years, it has given me great pleasure to see in what a plain, business-like manner he kept the books, so easily examined, and I sincerely concur in this resolution.

THE PRESIDENT—You hear the resolutions. Those in favor please rise.

(Unanimous rising vote.)

NEW MEMBERS.

THE SECRETARY—I have the names of candidates for membership which I will read: Walter F. Scott, Brandon, Vt.; George L. Rice, Rutland, Vt. These I recommend and I think Mr. Drew will recommend them also.

THE PRESIDENT—I will.

THE SECRETARY—We have the names of Benjamin F. Davis, South Lee, N. H.; Chauncey Gleason, Haverhill, Mass.; B. F. Barnes, Haverhill, Mass.; H. F. Cater & Son, North Barrington, N. H.; Eugene A. Holt, Bennington, N. H.; Frank T. Moore, West Peabody, Mass.; Frederick Kimball, East Haverhill, Mass.; these are recommended by Mr. Garvin and Mr. Yeaton.

The Vermont Experiment Station, by Cassius Peck, Burlington, Vt., farm superintendent, recommended by Mr. Drew and myself; Alfred J. Taylor, 257 Broadway,

New York, recommended by Mr. Hayes; John A. Taylor, Owego, N. Y., recommended by Mr. E. A. Schauten of Cortland, N. Y.

A motion was made that they all be elected.

THE PRESIDENT—You hear the motion, that they all be elected members upon payment of the membership fee.

(Unanimously adopted.)

THE PRESIDENT—We will now call for the treasurer's report.

THE SECRETARY—Mr. President: At my request Mr. Winsor prepared a report of the treasurer's (Mr. Smith's) account, starting with the account as he took it at the last meeting and adding to that the amount that is in my hands at the present time not paid over which I think he will read.

The acting treasurer, Mr. Winsor, then proceeded to read the report as stated above, it having been audited by Messrs. Brown and Magie.

AYRSHIRE BREEDERS' ASSOCIATION IN ACCOUNT WITH HENRY E. SMITH, TREASURER

RECEIPTS.

1899.		
Feb. 1.	Cash on hand.....	\$ 790.19
	Sale of herd-books.....	10.25
	Deposit in Smithfield Savings bank.....	2,631.32
Nov. 1.	Interest on deposit.....	112.28
		<hr/>
		\$3,544.04

EXPENDITURES.

1899.		
	Expense of annual meeting.....	\$19.20
	Express and postage.....	1.39
	Balance on hand, viz: Deposit in Smithfield Savings bank.....	\$2,631.32
May 15.	Deposited in bank.....	300.00
Nov. 1.	Deposited in bank.....	450.00
	Interest on deposit.....	112.28
	Cash.....	29.85
		<hr/>
		\$3,523.45
		<hr/>
		\$3,544.04
	Auditor's report of balance in hands of secretary.....	523.82
		<hr/>
	Total cash assests.....	\$4,067.86

THE PRESIDENT—Gentlemen, what will you do with this report?

MR. HAYES—I move it be accepted and adopted.

THE PRESIDENT—Gentlemen, will you accept and adopt it?

(Unanimous vote for its adoption.)

THE SECRETARY—I received the following from F. A. Converse, secretary of the New York state Breeder's Association. Copy of resolutions passed by New York State Breeders' Association, December 7, 1899:

Whereas, such a marked difference in type of the Ayrshire cattle exists between several breeders that it practically forbids an attempt to judge correctly by the comparative system, and that this constitutes a great source of error and dissatisfaction, therefore be it

Resolved, that the Ayrshire Breeders' Association of United States and Canada be requested to make their scale of points more exact and clear, and that they notify the secretary of this Association of their action.

THE SECRETARY—The above request to revise our scale of points was laid before the Executive Committee, and they voted to recommend to the Association that it be referred to the Executive Committee to appoint someone to revise. It needs a vote by the Association if they wish to have the scale of points revised, and either appoint a committee themselves or refer it to the Executive Committee. The last scale of points was made February 21, 1889, and it seems, for the good of the Association, that once in ten years or so, we should look over the scale of points and see if there is need of any change.

MR. HAYES—I move it be left in the hands of the Executive Committee.

(The motion was seconded and adopted by unanimous vote.)

The Executive Committee referred it to J. D. W. French and C. M. Winslow.

THE SECRETARY—Mr. President : The Canada people are very anxious to get into our herd-book because our government requires an entry in our herd-book before they will admit them free of duty. The Canada people have for several years past been working over their pedigrees trying to look up the missing links and trace each animal through definite animals to importation in order that they may be eligible to registry in our book for the purpose of sales across the line. At present our government does not look upon a registry in the Canada Ayrshire books as a sufficient guarantee of purity of blood, they not having been very particular about their records and admitting to their appendix the registry of animals of doubtful purity, but now that every Ayrshire that is sold to come over the line free of duty must be registered in our book they have revised their book and are throwing out all that we will not accept, in the hope that our government will accept a registry in this book as authority, and save them the trouble and expense of registering in our book.

There have been quite a number of Ayrshires imported from Canada within the past two years which were obliged to pay duty because they were not eligible to registry in our book. Then, too, the Canadians are anxious to have our government accept their book as authority because there are a good many of their old families of Ayrshires which until recently have had a flaw in their pedigree and were not eligible to our book, but now they claim to have them straightened out and eligible. But there are so many unrecorded animals between the present animals and the imported ones that the expense of a record in our book prevents a sale when the record must be made before importation. But if their book was received as authority the purchaser would not find out his mistake until he had brought his animal over the line and wanted it entered in our book. They

wrote me the other day and asked me to bring up before our Executive Committee the matter of two cows which they were very anxious to have recorded in our herd-book, because they would not accept in their herd-book anything that was not eligible to ours. They have got these two cows down so they are quite sure that each cow is out of one of two certain cows and sired by one of two certain bulls, but just which they do not know ; but it is their very strong opinion that it is by one of two cows by one of two bulls, and they request us, in order to admit several hundred of their cattle into good standing, to make a departure in our herd-book and substitute two dams and two sires for one calf. When the matter was brought up before the Executive Committee this morning, it was decided to recommend the Association to instruct the Secretary that when they can be satisfied themselves that the animal is from one dam and one sire, by name and number, and will so record it in their herd-book, we will accept them, otherwise not. But it remains for the Association to settle that matter.

THE PRESIDENT—Gentlemen, what do you say ?

MR. HAYES—I move it be left as the Executive Committee recommended.

(Motion adopted by a unanimous vote.)

THE SECRETARY—Mr. President : The Canadians have felt it was a great hardship to have to pay so much to get into our books. For a great many years it was of no great consequence to them whether they got in or not, but at the present time they are making sales from Canada over here, sending cattle to buyers, and they have to be recorded in our herd-book before they can get in without duty. A great many of their cattle of late years, by the strenuous efforts of a good many men, have been identified so that an animal which formerly traced back to a herd, or one or two cows has now been traced to one dam. But it happens very often, in order

to register an animal they have to record 50, 75 or 100 cows, and I received a letter from Mr. Callum the other day saying it was going to cost \$25 to register one calf, and it was not worth any more than that.

At the request of the secretary, Henry Wade, who is trying to put their book on a solid basis, I met him and we agreed on the following terms, provided the Association acquiesced: We require that a member of our Association shall pay one dollar for the entry of an animal and for ancestors, (the record of which is of no value to him except to connect animals already recorded as importation) shall pay twenty-five cents apiece. I arranged with Mr. Wade, if our Association would endorse it, that I would recommend that they be allowed, if they wanted to sell any cattle over here, to enter their animal at one dollar and one dollar each for all animals back of it necessary to connect the pedigree in our book or to importation up to ten animals, and all back of ten animals at twenty-five cents apiece. He was satisfied and said that if we would do that they could have their cattle recorded. I thought that was a fair offer and we can afford to accept them under those conditions. It would make it rather expensive for them anyway. If we hadn't done that, they would send the animal over here to the buyer and he would get it recorded at twenty-five cents, so that I thought on the whole, we would be money in and I thought it wise to do it; but it needs the endorsement of the Association.

THE PRESIDENT—What does the Association say?

MR. HAYES—As I understand it, the Executive Committee have decided to let them in at one dollar apiece up to ten, and then twenty-five cents after the ten. Is that right?

THE PRESIDENT—That's it.

MR. HAYES—I move it be left as the Executive Committee has decided.

(Adopted by unanimous vote.)

THE PRESIDENT—The next business, gentlemen, is the election of officers.

THE SECRETARY—First is the election of president, who is elected by ballot. Will you nominate for president?

MR HAYES—I move the secretary be authorized to cast a ballot for the election of Mr. Drew as president.

(A ballot was cast by the secretary and Mr. Drew was unanimously elected.)

THE SECRETARY—Mr. Drew is elected.

THE PRESIDENT—Well, gentlemen, if time would allow, I would make you a speech, as I am so well adapted to speech-making. Thank you for the election. If you will bear with me another year, I will be pleased to serve you.

THE SECRETARY—The vice-presidents are next and the president has asked me to read the list.

(List read by secretary.)

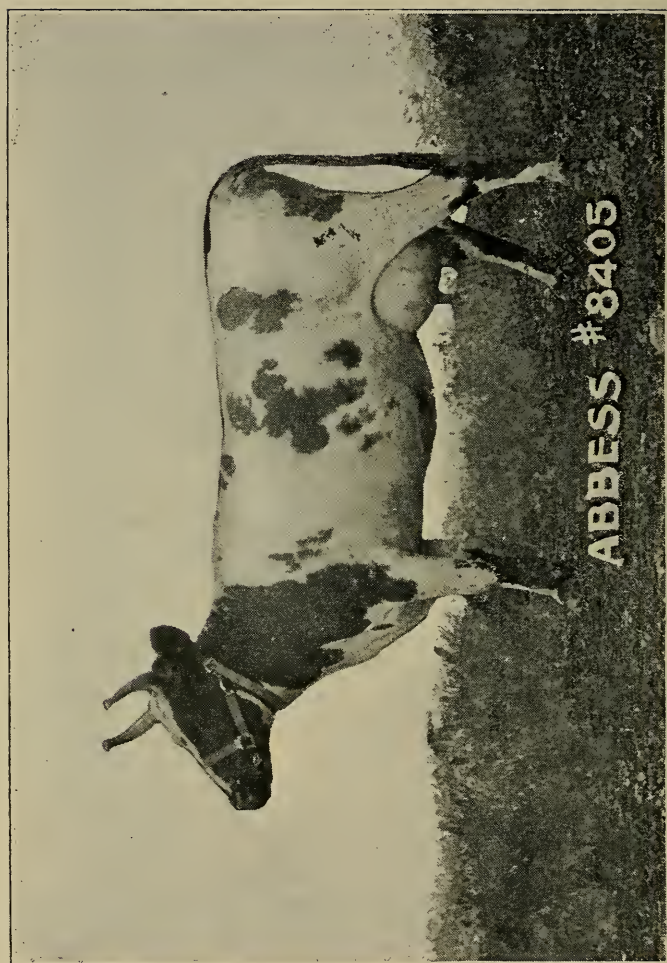
I have a letter from Mr. Sears, saying he has gone out of Ayrshires and thought it would be of no especial benefit to the Association having him remain an officer, and would suggest someone else be put in his place. I would name Dr. Turnbull of Monaca, Penn., to take Mr. Sears' place. We who were at the last meeting remember him as a stirring man, who is doing a good deal in the matter of pushing Ayrshire interests. I would nominate the same list of vice-presidents with Dr. Turnbull in place of Mr. Sears.

THE PRESIDENT—I heartily concur with the secretary as to Dr. Turnbull being in a location that will do us some good and in a manner that will be useful.

(It was unanimously voted that the secretary should cast a ballot for the following list for vice-presidents, Obadiah Brown, Providence, R. I., H. R. C. Watson, New York, John Stewart, Elburn, Ill., Thos. Turnbull, Jr., Monaca, who were elected.)



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ABBESS #8405

THE PRESIDENT--Now, gentlemen, who will you have for secretary?

(It was unanimously voted that the president should cast one ballot for Secretary Winslow, who was elected.)

MR. BROWN--We have a young man who is present with us from Rhode Island whom I think eminently fitted to occupy the position of treasurer. As he is a stranger to most of you gentlemen I will say this for him: He is cashier of the bank of which Mr. Smith was president. Our funds are all in that bank. So far as I know him, and I have known him from a small boy, he is a very eminently qualified young man to fill the position. He is an Ayrshire breeder, takes an interest in Ayrshires. I do not want to say too much in his praise for he is present, but from the position he holds and the company he has kept while with Mr. Smith, I think it is fit for you to consider him a worthy candidate for the position as treasurer. I take great pleasure in naming Nicholas S. Winsor to fill the place of our late treasurer, Mr. Henry E. Smith.

(It was voted that Mr. Brown should cast a ballot for Nicholas S. Winsor as treasurer, and he was unanimously elected.)

THE SECRETARY--The members of the Executive Committee, whose term expires this year, are Mr. J. D. W. French and Mr. John W. Scott. I would like to name those two gentlemen for the term of three years. Mr. Scott is a man who is doing a great deal in his state to wake them up on Ayrshires, by speeches at dairy meetings, exhibits at fairs and articles in his State papers. He is cashier of the First National bank of Austin, Minnesota, and has a large farm stocked with Ayrshires. I would like to repeat one statement that he wrote me the other day, and that is, he is not selling any animals that are not

going to be a credit to the Ayrshire Breeders. Any animal he finds not worthy of perpetuating, he disposes of, which I think is a good recommendation for any breeder. He sells nothing except what is going to benefit the breed.

MR. WELLS—I thoroughly recommend Mr. Scott. I have had a great deal of correspondence with him. He is a good Scotchman, understands himself thoroughly and knows how to express his views.

THE SECRETARY—I move that Mr. Wells be authorized to cast a ballot for Mr. Scott and Mr. French.

(The ballot was cast and Mr. French and Mr. Scott were elected.)

THE PRESIDENT—You are in want now of an editing committee. Mr. Winslow and Mr. J. D. W. French was our last committee.

(It was unanimously voted that they should be elected for the coming year.)

THE SECRETARY—Mr. President, at the last meeting in New York we had present a painting of the cow, Duchess of Smithfield, which Mr. Alvord, chairman of the Dairy Department at Washington, had painted, and from that painting had a picture taken—not exactly lithographed—I do not know what it is called, for publication, and it appeared in a yearly report of the Department of Agriculture. He also, I notice, in the department publications, has a skeleton sketch of this same cow to show the different points of a dairy cow. At his request last year, a committee was appointed to examine the picture and write to Major Alvord any criticisms in regard to it as this was an experiment of the government. We appointed Mr. French on that committee—I think Mr. French and Henry E. Smith were appointed, and they evidently reported, because here is a letter in regard to it.

U. S. DEPARTMENT OF AGRICULTURE.

BUREAU OF ANIMAL INDUSTRY, DAIRY DIVISION.

WASHINGTON, D. C., Feb. 14, 1899.

J. D. W. French, Esq., Boston, Mass.

My Dear Sir: Please accept my thanks for your favor of the 11th inst., giving us your excellent criticism of the oil portrait of the cow, Duchess of Smithfield, owned by this department.

We are pleased that you are so far able to commend our efforts to make a good picture of a typical milch cow, selected from the Ayrshire breed.

Unable to give the artist a look at the original, or even a good description of her color and markings, I am gratified to find we succeeded so well.

Very truly yours,

HENRY E. ALVORD,

Chief of Dairy Division.

MR. FRENCH—Mr. Alvord has published that portrait as a typical dairy cow. It is a very good picture. Possibly somebody might criticise the coloring somewhat as being not quite the color of the original animal, but take it altogether, it is a very good picture of a dairy cow, and I think it is a good deal to the credit of the breed that the Dairy Bureau in Washington should have taken an Ayrshire cow, of course, it is a well-known one, the Duchess of Smithfield, as the standard type of a dairy cow, to go throughout the land as such and throughout the world. I presume members can get that report by applying to the Dairy Bureau at Washington, of which Mr. Alvord is the chief.

THE PRESIDENT—I want to say further, gentlemen, about the Ayrshires: The president of the Vermont State Agricultural society, Mr. George Aiken, wrote a paper the other day. He is a Jersey breeder and represents the Billings farm. He said in his paper that what they want of a Jersey is to make it as near the type of an Ayrshire as possible and then they would have a dairy cow.

THE SECRETARY—Mr. President: It is said that a child draws its character from its mother's milk and this man you speak of is a Scotchman, born on a Scotch farm, raising Ayrshire cattle. He came over to this country and had a herd of Ayrshire cattle, but was paid a very large price to abandon Ayrshire cattle to go into the Jerseys. His character remains the same—Ayrshire. (Applause.)

MR. FRENCH—I want to say that this is the largest Ayrshire meeting that we have had, I think, for a good many years—over thirty men present, some whom we have never seen before, I think, at any of our meetings. They have come here, many of them, from a distance, a number of them from different parts of New England, and I think it would do them and us good if they would tell us some of their experience in breeding Ayrshire cattle. I think it would be a pity to have the meeting dissolved without hearing from them.

I hope every man will go home with at least one good intention, if nothing more—that he will keep a milk record of his herd, testing it with the Babcock test and ascertaining the butter fat. This will help the breeder more than anything else in finding out which are the best animals, which the animals he ought to keep, and will have more influence on the breeding of his herd than anything else. First, the keeping of the milk records, these records which the secretary has here, weighing the milk of every cow twice a day if possible, and filing those, making up the record for the year, the number of days in milk, and ascertaining the butter fat of each cow, and then if he wants to breed his herd up so that the Ayrshires will have quality as well as quantity, raise the calves from cows that produce the greatest amount of butter fat, then not only will the Ayrshire breed stand on a level with any other breed, but it will stand at the head. The only thing

that has been lacking has been butter fat. The only way you can ascertain the butter fat, except by the churn, which it is not always possible to do, is by the Babcock test. Test your cows two or three times a year at different times and periods and then go on that basis. It has been the common custom of many of us in the past to raise every good looking calf that came along or came from a good looking cow. If we are to go to the head, which it looks as though we might do, a little care and trouble is required on the part of the breeders. The Ayrshire breed has been going on gradually without any boom, increasing in favor, and is steadily rising in the influence and the appreciation of it by Ayrshire breeders, and by men outside as well. There are only a few things wanting and those are the things I have mentioned, but there is nothing any one man can do that will help himself more or the breed more than those two things—keep the milk record and test your herds with the Babcock test, and then breed accordingly from such cows as may present themselves after that test as being the best to raise your calves from.

I hope, Mr. President, we shall hear from the members present in relation to their experiences. I would like to know how many men present keep a milk record, then I would like to know how many men present have ever used the Babcock test in their herds. I think it would be a useful piece of information. I hope at the next meeting, upon asking these questions, every man will raise his hand.

THE PRESIDENT—Gentlemen, do you hear the request of Mr. French. You who keep a milk record, please raise your right hand. About six or seven.

MR. FRENCH—How many tested their herd with the Babcock test.

(In reply to this inquiry, about eight answered in the affirmative.)

THE PRESIDENT—Mr. Brown, you have heard Mr. French's plea to the breeders, and as you are about as old a one as we have, we would like to hear from you about your experience with Ayrshires, what you have to say that is good of their qualities—say anything as long as it is Ayrshire.

MR. BROWN—I do not know as I am prepared to make any speech. I have bred Ayrshires for the past thirty years. As far as I am concerned I am very well satisfied with what I have raised. I have nothing else in my herd. They are good breeders, they fill themselves always with anything you may give them. The only objection I have ever had to the Ayrshires is on account of their teats—they are inclined to have too small teats, and I so explained to Mr. John Stewart of Scotland, when he was at my place. "That is the very reason we are not importing Ayrshires today," I told him. "We like them well, but we do not like their short teats." He expressed himself as being surprised that we had better Ayrshires in America than they had in Scotland. I thought that was quite a puff. I told him we had tried to breed with care from the best cattle, that we bred for milking purposes, and in order to get the milk easily we bred the long teats as much as we could. He said he should go home feeling different from what he had, and thought we were on the right track. As I have already said, I have bred for the past thirty years a good type of the dairy cow, a cow that will give good milk. When you come to quality and quantity, I refer to Mr. Drew who lives way up on the mountain, and what he tells you, he is up so high on the hill, can be heard everywhere.

THE PRESIDENT—To show you that I feel a little cheap myself, we will call upon Mr. Yeaton, who took the prize away from me in butter making.

MR. YEATON—Mr. President, I do not think I can say anything to this Association. I think, perhaps, the secretary can talk very much better than I can. Mr. Drew blamed me a little today for feeding so heavily. I find that the Ayrshire cattle do not do as well unless they are well fed. Now, in this test that we had in May before the cattle were turned out to grass, I did give the cows a little extra feed, but I did not get any of them off their feed. They all ate what I gave them and looked for more, and they gave me quite good returns. Mr. French asks what our cows have done. I will speak of just one which I mention in my circular, I think. She gave for the seven days 428 pounds of milk, an average of 61.2 per day, and her milk tested 3.8, I think it was. She gave 18.98 pounds of butter, which is 2.35 pounds a day for the week. She gave her weight in milk in 18 days for the month of May—that is, her estimated weight. I judge she would weigh 1,000 pounds and her milk weighed 1018 pounds. Now, I do not believe that cow would have given that if she had not been well fed. It occurs to me that it is profitable, if you want good returns from a cow, to feed well. I have practised that for at least the number of years that I have been breeding Ayrshires. I think our president himself feeds his cows pretty well. A cow won't give 9,000 pounds of milk unless you give it some fuel to live on. I do not think I will attempt to take up any more of your time by trying to interest you further, as I do not think I can do it. I will, however, extend to you an invitation to come to the town of Rollinsford—there are two herds there, one beside my own, that of the veteran breeder, Mr. Garvin. He had a little calf there in his barn about as big as a poodle dog. I asked him if he was going to raise it, and he said, "No, I will give it to you if you want it." This little cow, Annie Bert, has given me over 58,000 pounds of milk in seven years. She is the smallest cow in the barn and the homliest. I hope you will call on such veterans as Mr. Garvin.

Mr. Garvin was thereupon asked to make a few remarks, in response to which he stated his inability to make much of a statement, but that he had been a breeder of Ayrshire cattle for fifteen years or more.

Mr. Wells was then called upon.

"Gentlemen: You ought not to call on me every time—you called on me last time. I have been breeding Ayrshire cattle for forty years and I have not tired of them yet. I have kept a record most of the time. I have been supplying milk to the Medical Society, and they require that the milk shall be weighed and tested under the Babcock test every month. It is not required that I shall feed any particular food, but the cow must be kept in good, healthy condition at all times. I have had cows give as high as 10,000 or 12,000 pounds in a year, but I think it is a pretty good cow if she gives 6,000, a very good cow. I was talking to Mr. Fuller at one time about that great Jersey cow in Canada who made a great Jersey record, Mary Ann of St. Lambert. She had three men to take care of her and she was fed fifteen or twenty times a day, the feed being changed constantly. She was a large cow. I find that the larger frame a cow has the more milk she will give; a small cow will not give as much milk per year as a larger cow.

THE PRESIDENT—Here is a gentleman who has often met with us—Mr. Magie of New Jersey, an old breeder.

MR. MAGIE—Gentlemen, I am very glad to see so many Ayrshire breeders here today. I think the Ayrshire breed is looking up; it is in our section of the country. We are raising milk there for the market, nearby markets largely. Some portions of New Jersey ship to New York, but our milk and that of many dairy-men round us go to the cities of Newark, Elizabeth and Portsmouth, the larger cities. At New Brunswick,



MISS CORNELIA 3rd 8984



PRINCESS IRENE #13151

where the State Farm is, they are now getting some Ayrshires. Prof. B., who is at the head of it, is very much interested in Ayrshires, and has recently bought some. Some years ago they started a herd of five different breeds for the sake of testing the milk. They were only running a short time before their barn was accidentally burned and they were destroyed, none of the cattle being saved. But after building they bought a few more. There was, however, a change in the administration of affairs and their dairy rather ran down. They have now placed it in the professor's hands and he is building it up. The object is to sell the milk in New Brunswick. We are running two wagons into Elizabeth. As has been said by Mr. French and our president, we want to breed for quality as well as quantity. We have bought some other breeds sometimes when short of milk and find the Ayrshire cows' milk is the best for the retailer, although we bottle our milk. If you bottle Jersey milk and you take the cream off and let it stand a while, it looks like skimmed milk; but the bottom of the Ayrshire milk will look better, is better, and is the best milk for children's use of any in the market. We have had Jerseys and Holsteins, and occasionally Guernseys, but the Ayrshire is the best. I know of one instance where a very weak child was raised with Ayrshire milk alone, and has grown to be a strong, healthy boy, and I have known of a great many such instances. It is an acknowledged fact with us that the Ayrshire milk is the best for human food. People generally do not appreciate what good milk really is for the human family, as well as for all young animals in growing them, and I can assure you, as has been said, while we have kept some partial records, in our business hurry, we have not kept them as complete as they should be. We are making tests now, or did last year, a number of times with the Babcock

tests, and we are weeding out and raising from our best milkers giving the best quality of milk.

MR. FRENCH—A year ago this last summer my farm buildings were struck by lightning which disorganized my farm a good deal, and my records and other things were destroyed, so that I am just getting a fresh start and have not a large number of Ayrshire cattle—some twenty head. I have nothing remarkable to show at the present time, still I shall be very glad if there are any members here who would like to see them. I have a new barn, which is perhaps worth seeing.

A motion was made by Mr. French that the salary of the secretary be the same as last year, which motion was unanimously adopted.

THE SECRETARY—It is customary to vote where we shall hold the next annual meeting. Where will you hold it?

THE PRESIDENT—Why is not Boston a good place?

After discussing the matter at some length it was finally voted to hold the next annual meeting in Boston.

It was voted that the list of judges be referred to the Executive Committee for revision.

It was voted that entries for the next volume of the herd-book be closed the first of October, 1900.

(Adjourned.)

EXPERT JUDGES.

It is the opinion of the Ayrshire Breeders' Association that the men selected by the Agricultural Fair Associations throughout the country, to judge Ayrshire cattle in the ring, should be men acquainted with Ayrshire cattle, and men familiar with the scale of points and characteristics of the breed.

The Executive Committee have selected the following names of men in different parts of the country whom

we believe to be experts in judging Ayrshire cattle, and would recommend to Fair Associations as judges :

Alonzo Libby, Westbrook, Maine.
 Charles H. Hayes, Portsmouth, N. H.
 George H. Yeaton, Dover, N. H.
 W. R. Garvin, Dover, N. H.
 L. S. Drew, Burlington, Vt.
 F. W. Spalding, Poultney, Vt.
 H. R. C. Watson, Brandon, Vt.
 C. M. Winslow, Brandon, Vt.
 J. D. W. French, North Andover, Mass.
 Obadiah Brown, Providence, R. I.
 H. S. Joslin, Mohegan, R. I.
 Dudley Wells, Wethersfield, Conn.
 S. M. Wells, Wethersfield, Conn.
 J. H. Larned, Putnam, Conn.
 B. C. Sears, Blooming Grove, N. Y.
 George Taber, East Aurora, N. Y.
 A. S. Tubbs, Mexico, N. Y.
 C. S. Barney, Milford, N. Y.
 Frank Converse, Woodville, N. Y.
 J. D. Magie, Elizabeth, N. J.
 William Lindsay, Elizabeth, N. J.
 B. Luther Shimer, Bethlehem, Pa.
 J. P. Beatty, Pataskala, Ohio.
 John Stewart, Elburn, Ill.
 C. S. Plumb, Lafayette, Ind.

AYRSHIRE MILK RECORDS.

The following are yields of milk that have been reported of 9,000 pounds and over for 365 consecutive days :

Name	No. A. R.	Pounds of milk
Olah,	11471	9020
Belle Hebron,	13013	9084
Rose Sultana,	12072	9172
Roxie,	4498	9191
Rose Deruth,	10346	9253

Name.	No. A. R.	Pound of milk.
Lukolela,	12357	9268
Lady Teazel,	6579	9268
Rose Alta,	9529	9307
Xoa,	11469	9361
Betty Lightfoot,	7498	9394
Yucca,	11470	9496
Annie Bert,	9670	9613
Belle Temple,	3353	9624
Roxanna 5th,	4606	9671
Queen of Ayr,	1776	9775
Island Belle,	1292	9982
Biona,	12383	10024
Vinewood Queen,	8092	10026
Ethel Douglas 2d,	2342	10066
Rose Electa,	10336	10207
Ruth,	4816	10219
Rose Eola,	8510	10323
Jennie Clyde,	12028	10344
Queen of Ayr 4th,	4465	10426
Nellie Clyde,	12723	10507
Rose Deross,	10347	10645
Duchess of Smithfield,	4256	10748
Queen of Ayr 5th,	4466	10801
Ellen,	8324	10823
Queen Mary,	6578	11154
Meewe,	11130	11252
Lady Murcia,	11111	11543
Myra,	2955	11908
Manton Queen 4th,	6100	12162
Rena Myrtle,	9530	12172
Lady Fox,	9669	12299
Alice Douglas,	4398	12617

AYRSHIRE BUTTER RECORDS.

There is a long list of records of over 300 pounds, but we have given only those reported as 400 or over.

Name	No.	Lbs. butter
Quess 2nd,	3120	14.6 in seven days
Rosa,	3143	14.15 "
Bessie Bell 3d,	4323	15.4 "
Tempie,	3263	15.6 "
Juniper 4th,	4578	17.11 "
Duchess of Smithfield,	4256	19.6 "
Rose Cleon,	11143	49.8 in Jan., 1897
Rose Electa,	10336	57.8 "
Rose Sultana,	12072	64.0 "
Rose Ladye,	11158	78.4 "

Name	No.	Lbs. butter.		
Lukolela,	12357	402	in	one year
Rose Clovis,	12777	402		"
Queen Selga,	9545	404		"
Rose Veritas,	12076	404		"
Rose Allie,	11154	405		"
Olah,	11471	412		"
Nancy B 2d,	11936	412		"
Biona,	12383	413		"
Nancy B,	9581	416		"
Annie Bert,	9670	417		"
Printsteps 2d,	8410	418		"
Mexic,	11131	419		"
Rose Alta,	9529	420		"
Rose Sultana,	12072	421		"
Minnehaha 3d,	12646	424		"
Ruth,	4816	425		"
Xoa,	11469	428		"
Acelista,	12094	438		"
Clio Rose,	7525	441		"
Yucca,	11470	444		"
Lovely,	9596	448		"
Rose Clenna,	11153	455		"
Rose Ladye,	11158	463		"
Rose Electa,	10336	467		"
Iola Lorne,	12773	474		"
Rose Erica,	12775	504		"
Rena Myrtle,	9530	546		"
Meewe,	11130	567		"
Rose Deross,	10347	572		"
Lady Fox,	9669	624		"

AYRSHIRE CATTLE.

(A paper read at the Minnesota State Dairyman's Association by John W. Scott, Austin, Minn.)

The County of Ayr, not the County of Ayrshire, as a recent writer on breeds of cattle hath said: This county in the southwest part of Scotland has given the name to a breed of cattle noted for their dairy qualities. The country whereof I speak, is generally low towards the sea-shore, gradually rising by easy slopes, and wavy undulations to a ridge of high or hilly country. It has many woodlands and is well watered. The climate is moist and rather windy, although not severe.

The soil throughout is of moderate fertility. Its principal crops or products are grasses, oats, wheat, turnips, potatoes, beets, etc.

Dairy is the leading interest, although grazing is carried on to some extent.

Ayrshire in olden times was divided into three distinct districts, viz : Cunningham, Kyle and Carrick. Prior to the year 1780, the cattle kept in the districts of Kyle and Cunningham were a small, ill-fed, ill-shaped and inferior breed of cattle.

Thus you see, ladies and gentlemen, that we in the south had no more to boast of than our honorable president had in Aberdeenshire.

But to-day, what a wonderful change has taken place. For instance, behold the Aberdeen, Angus and Cruickshank cattle. They in Aberdeenshire were busy piling on beef, while away down in Ayrshire they were hard at work packing butter and cheese. I imagine "Auld Cruickshank" saying, (were he living) "Shon Mathieson, hoo ye hae degenerated. Ye Dinna ken a guide quey when ye see it. What a pity ye went awa' wi' auld mortality to the Isle of Sark, for ye're a' bones noo instead of guide, honest beef."

There is an old adage in the County of Ayr, which is characteristic of the District of Cunningham,

"Carric for a man,

Kyle for a coo,

Cunningham for butter and cheese.

It was in this country that the plowman poet was born. But perhaps our Honorable Chairman will claim that it was in Aberdeenshire, as he claims all the cream, but an allusion is made in one of Burns' letters dated Nov. 13, 1788, to a heifer that had been presented to him by Mr. Dunlop, as the finest quey in Ayrshire, he kept Ayrshires on his farm at Ellisland, and at that time they had a high reputation.

Ayrshire cattle of today, like the improved short-horn, originated from various crosses, but there is some uncertainty as to the early history of their crosses.

It is said that the Holderness were introduced into the South of Scotland from the North of England, and it is probable that they may have been used ; again, the introduction of the Kerry from the coast of Ireland, and it is further claimed that the Dutch from Holland and the Alderny from the Channel Islands were also introduced into that country, and these various importations have given rise to the origin of crosses from those breeds, but notwithstanding the assumption, there is more or less of a resemblance to the said respective breeds, but the breed is undoubtedly descendant of the Kylvie, or native cattle of Scotland, modified by selections, and these selections have been aided by crossing with other distant breeds. Whatever part these breeds may have had in the origin of the Ayrshire breed, it is certain that the hard-headed sense of the Scotsman, that evolved the steam engine into usefulness, had guided those engaged in moulding a dairy cow, which for average and general conditions stands without a peer today.

Since 1805 marked improvements have been made in this breed of cattle, and in 1836 the Highland Agricultural society offered a premium for the competition of this breed.

In 1853, for the first time, a recognized standard was adopted by the Ayrshire Agricultural Association.

In 1866, '68 and '71, the various writers describing the Ayrshire cow, state that the chief point of merit is said to be, "a capacious and well set udder."

It is a fact worthy of mention, that the Farmers' clubs and Agricultural societies in educating the farmers and offering premiums, have done more to improve this breed, or any other breed of cattle, as it has had the effect of creating greater interest and inciting stronger efforts towards improvement.

These cattle are now scattered throughout Great Britian, and have been introduced into other countries, viz : Finland, Norway and Sweden, Holland, Australia and New Zealand, South America, Japan and Canada, in all of which they are highly esteemed for their dairy qualities.

We must not overlook our own country, for in 1822 or '28 they were introduced into this country. In 1831 there is some mention made of importations, and in 1837 they were introduced into the New England states by the Massachusetts Society for the Promotion of Agriculture. They are now scattered throughout the New England states, New York, Pennsylvania, South Carolina, California, Ohio, Indiana, Illinois and Wisconsin, and a few herds have been introduced into our own Minnesota. In Canada this breed has been very popular with dairymen, and there being a similarity in the climate of Canada to our northwest, it would only go to show that they should become popular with us, being a hardy breed for our climate.

It may be well to direct your attention to this fact : That for a hundred years here is a breed of cattle which has been bred in a climate with its cold, bleak weather, rugged pasturage and scanty feed, that has been developed into a hardy and enduring race of cattle. Here is a breed, bred, perhaps, for centuries, also in a country with a climate as severe in many respects as our own northwest—yes, I say—a country swept by frequent coast storms of sufficient severity to try the constitution of the most hardy cattle. Will this not count for something in the selection of a breed for our farms in the Northwest ?

In 1880 Prof. Sheldon, author of "Dairy Farming," said of the Ayrshire :

"They are wonderful milkers, doing well in milk where most breeds would hardly live, more completely





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than most, if not all, other breeds, they possess the property of converting into milk the elements of food. They are hardy enough to stand severe climates, while they have the faculty of quickly adapting themselves to altered conditions."

The Ayrshire has kept abreast with improvements until today, fellow dairymen, I have no hesitation in presenting to your attention a breed of cattle that with careful selection and breeding, is bound to take the front rank as a dairy cattle throughout this Northwest.

Every good farmer must keep up with improvements, and if he has that in mind his motto will be, "Get There," whether in breeding cattle or tilling the soil.

Dr. Sturtevant, a noted breeder and writer on Ayrshire cattle, says: "The Ayrshire has a superabundance of nerves; she is ever ready to employ them upon demand in self-defense or in self-support; she asks little beyond a fair chance, yet all this nature in her is in reserve, and she does not use it wantonly to disqualify her to be the pet of the household. She responds readily and appreciates good treatment, her looks appeal to ones intelligence to accord it to her."

The Ayrshires are of medium size. The cows averaging 1,000 pounds. They are short-legged, fine-boned and very active. They are wedge-shape generally, wide and low development of the brisket, insuring good constitution. They have well developed hind parts, long, broad and straight, and deep at the flank. All good specimens have well arched ribs, giving room for their digestive organs. When in milk they do not carry a pound of extra flesh. In color they are red, brown or white, or a mixture of these colors, each color being distinctly defined.

Again Mr. Peer, a large importer and one of the prominent judges at the Toronto Industrial exhibition,

and other eastern agricultural exhibitions, writes recently :

ON THE MODERN AYRSHIRE.

“The best of their kind are the best in the world.” That’s a Scotchman’s estimation of an up-to-date Ayrshire coo.

“Although I am not an Ayrshire breeder, I must say there is small chance of an argument with the Scotchman, except I should like to make this amendment, ‘the best of the kind are the best all-round dairy cows in the world.’

“When you call on a Scotch breeder it is of no use to ask him how much milk a cow gives. He does not know, or only says, ‘I have never heard any complaint of that coo.’ If you go to the dairyman and ask him, he is not going to point out to a customer the best quey, for that is the sort he doesn’t want his master to sell.

“I remember once asking a Scotch breeder why it was they did not go in for testing their cattle and giving them milk records. ‘Aye mon,’ he replied, ‘but ye’r na’ thinking o’ the liars ye would be making o’ the Scotchman.’ Then looking at me slyly he added, ‘ye must na lead us into temptation.’ Then I thought of the great amount of temptation that breeders in the United States are called upon to withstand when publishing records. I had nothing to say. As my friend, Mr. Howie, often said, ‘A coo is a coo and that’s a’ about it,’ which is equivalent to saying, if a cow is a good cow she will show it, and a man who knows his business can tell without leading his neighbor into temptation to lie about her performance.

“I am informed that the 1st, 2d and 3d prize cows in the ring of cows at Syracuse this year were all over sixty pound cows, and they looked it. He ends by saying: ‘To my mind they are the highest and most per-

fect utility cow that has ever been produced, all in spite of their rare beauty and style.'

"Before closing, Mr. Chairman, I wish to make a few remarks as to the qualities of the Ayrshire, first as a milk producer and lastly as a neat animal. I do not wish to weary you, and I do not want to be led into temptation, so will pass over a few facts briefly and confine myself to official statements.

"At the British Dairy show in 1879, twelve samples of milk were tested representing seven different breeds and three crosses. One Ayrshire, three Jerseys, one Guernsey, one Kerry, one Dexter, one Brittany and two Dutch cows. Highest on the list ranked the Ayrshire, showing the least water and most fat, followed in turn by the three Jerseys and the others in the order named above.

"The Ayrshire gave $5\frac{1}{2}$ per cent. butter fat, and the Dutch cows only $2\frac{1}{4}$ and $2\frac{1}{2}$ per cent. butter fat.

At the same show in 1880 an Ayrshire in competition with eighteen other cows of noted breeds, yielded twenty-five pounds and two ounces of milk and in pure butter fat 6.82 per cent., and was only beaten by a Jersey with 7.78 per cent., which, however, only yielded for the day sixteen pounds of milk.

At the Vermont Experiment Station in 1895, Rena Myrtle, H. R. 9530, gave 12,172 pounds of milk and 546 pounds of butter.

At the Vermont State Fair in the fall of 1897, the average of the 12 Ayrshire cows in the butter fat test was 4.99 per cent.

At the New Hampshire Experiment Station, with four cows of each breed, the average result for a full year test was as follows :

	Ayrshire	Jersey	Holstein	Durham
Pounds of milk,	5,845	4,847	5,971	6,140
Pounds of butter,	267	269.2	207	261
Per cent of butter fat,	4.28	5.12	3.15	3.86
Cost of keeping,	\$44.48	\$46.49	\$50.12	\$48.41
Pounds of butter,	21.2	18	20	24

In the report of the New Jersey Experiment Station, experimenting for the most of the time with three cows of each of the following breeds, the average cost of food per quart of milk was: Ayrshire, 1.66 cents, Gurnsey, 1.71 cents, Holstein F., 1.75 cents, Jersey, 1.91 cents, Shorthorn, 1.71 cents.

As a cheese cow she will give an average of from 600 to 1200 pounds in a year.

The pure Ayrshire cow, Duchess of Smithfield, H. R. No. 4256, weight 1128 pounds, has a certified record of 19 lbs., 6 oz. of butter in seven days, and yielded 44 lbs. of milk in one day; 463 3-4 lbs. in seven days; and 10,748 lbs. in one year. I will now exhibit a picture of this cow for your inspection, she is an American bred cow, and some six times removed from importation.

I now come to my last quality, which is of the least importance in dairy cattle, but which counts for something in the consideration of all the good points of a breed; that is, they should feed quickly, and this the Ayrshire will do, for when fed for the butcher then all her energies are directed to meet the demand.

I have another picture here which I will exhibit.

This is a typical Ayrshire cow. She was farrow at the time this picture was taken, having been milking over a year and a half.

Some of you dairymen will take exception to so much flesh as this cow displays, but this must be said of the Ayrshire: that she is always busy, and when not giving milk she is ever ready to give a good return in meat.

I have a young Ayrshire in the feed box at present and it is surprising how rapidly it is piling on beef, and as my countryman (Mr. Morton), whom I see in the audience, will bear me out, that we Scotchmen consider the Ayrshire meat the choicest. This general utility cow of which I have been speaking has had no booms

as some other breeds have had, but continued to advance and holds its ground wherever it has been introduced.

EARLY HISTORY OF THE AYRSHIRE DAIRY BREED.*

BY AITON.†

The dairy breed of cows in Ayrshire, now so much and so greatly esteemed, are not an ancient or indigenous race, but are a breed begun to be formed, first by the inhabitants of the bailliary of Cunningham in that county, within the last forty, and chiefly within the last twenty years. It appears, from an adage in the county of Ayr, that dairy husbandry had not only been practised in Cunningham, but that the making of butter and cheese had become the peculiar and distinguishing boast of the district at a very remote period; and the last and present generations of the inhabitants have shown that they still attend to that branch of industry, and have greatly improved on the favorite practices of their ancestors.

But though dairy husbandry has for many ages past been more attended to in the bailiary of Cunningham than in any other district in Scotland, it was only during the present generation that any material improvement was begun to be made, or even attempted, on the breed of cows in that district; and it is only within the last twenty years or thereby, that that improvement merited notice.

Every person now of fifty years of age or upwards, who has paid attention, from their youth, to the cattle in that district, will remember that the cows in the bailliary of Cunningham, and in that of Kyle, were generally, till after the year 1780, a puny, unshapely, and

* From Harleian Dairy System, 1829.

† Mr. Aiton's work was begun in 1815.

inferior breed of cattle, not superior in size, shapes, or qualities, to those still met with in the higher parts of Clydesdale, Peebleshire, or those in the islands of Arran and Bute. They were even inferior to these, from not being nearly so well fed as cattle generally now are in every district, except in some parts of the North Highlands.

The cows then kept in the districts of Kyle and Cunningham were of a diminutive size, ill-fed ill-shaped, and yielded but a scanty return in milk ; they were mostly of a black color, with large stripes of white along the chine or ridge of their backs, about their flanks or on their faces. Their horns were high and crooked, having deep ringlets at the root ; the plainest proof that the cattle were but scantily fed. The chine of their backs stood up high and narrow ; their sides were lank, short and thin ; their hides thick, and adhering to the bones ; their pile was coarse and open ; and few of them yielded more than three or four Scots' pints of milk per day, when in their best plight ; or weighed when fat more than from twelve or sixteen to twenty stones avoirdupois., sinking offal.

It was impossible that, these cattle, fed as they then were, could be of great weight, well shaped, or yield much milk. Their only food in winter and spring was oat-straw, and what they could pick up in the fields, to which they were turned out almost every day ; with a mash of weak corn and chaff daily for a few days after calving. And their pasture in summer was of the very worst quality, and eaten so bare that the cattle were half starved. The land was then under such barbarous courses of cropping, and so much overcropped, that, when turned to pasture, it yielded little else but weeds, and a few natural grasses of the worst quality ; and that coarse pasture was so much overstocked, and

eaten so bare, that the cattle were half starved, and had the aspect of starvelings.

A wonderful change has since been made in the condition, aspect, and qualities of the Ayrshire dairy stock. They are not now the meagre unshapely animals they were about forty years ago ; but have been completely changed into something as different from what they were then, as any two breeds in the island can be from each other. They are almost double the size, and yield about four times the quantity of milk that the Ayrshire cows then yielded. Formerly they were not of any specific breed, nor uniformity of shapes or color, neither was there any fixed standard by which they could be judged. But now they are generally of a brown and white color, in mixed patches ; and rules have been adopted for determining the purity of the breed and excellence of their quality.

These alterations, although they are extensive, have not been made by merely selling the farm stock, and replacing them with a different breed ; but the changes have been effected upon the former breed, partly by skillful breeding, and still more by better feeding and treatment.

But though these improvements in the dairy stock of Ayrshire were begun and brought to its present advanced state within the recollection of thousands who are still alive ; and though I kept a dairy stock for some time in the centre of the district where these improvements were first introduced, and about the time when they began to be improved,—I have not been able to trace the commencement of them to any particular person or family.

About the year 1760, or between that and 1770, some noblemen and gentlemen who resided in the eastern and southern counties of Scotland, procured cows of some English or Dutch breed, which were much

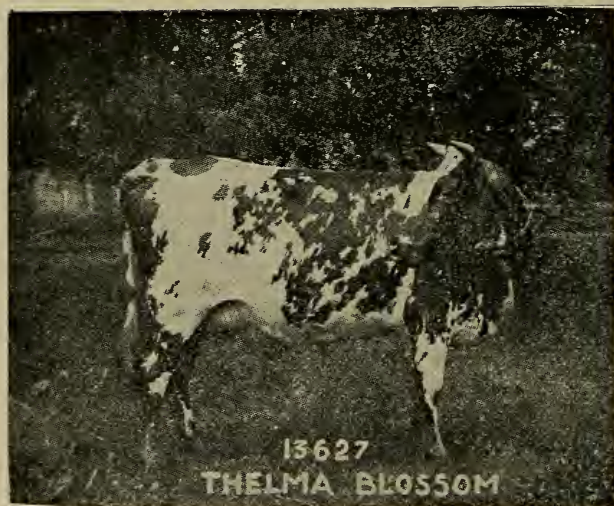
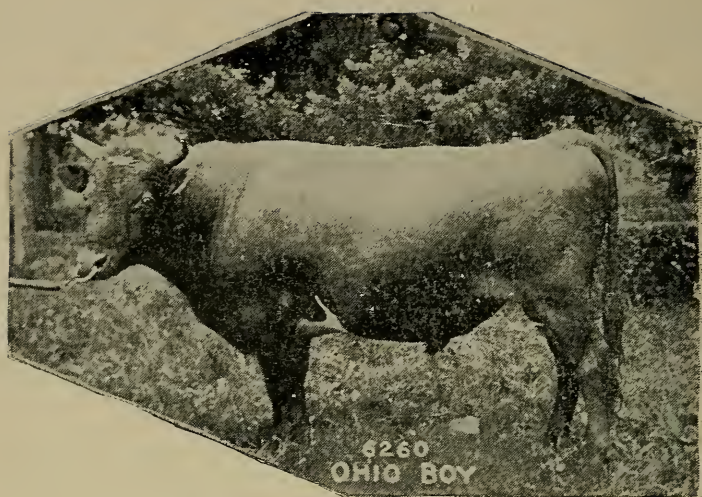
larger in size than any other then in Scotland ; and when these were well fed, on the sheltered and improved lands round the seats of their owners, they yielded far more milk than the native cows. It was their greater size, and the superior quality of milk they yielded, that induced these noblemen and others to purchase them ; and wherever their feeding in Scotland corresponded to what they had been accustomed to eat, their owners were not disappointed. But when these large cows were turned into pasture that was much inferior to that on which they had been reared, they fell short in milking, as all cows that are not well fed will do.

I am really uncertain as to the district or country from which these stranger cows were brought. They certainly were denominated Dutch cows when first introduced into Ayrshire. But from their being of a brown and white color, I am disposed to believe they were of the Teeswater breed.

Neither have I been able to discover who it was that first introduced them into the bailliary of Cunningham, nor to point out all those who did so. John Dunlop, Esq., of Dunlop, brought some of these English or Dutch cows to his byres at Dunlop House in Cunningham, soon after the year 1760. As they were there provided with the best of pasture, as the dairy was much attended to in that neighborhood, and as the improved breed of the mixed brown and white color came into vogue about Dunlop and Stewarton sooner than in any other part of Cunningham, it is likely that Mr. Dunlop's were among the first of the stranger breed that reached Cunningham.

The Earl of Marchmont, about 1750, purchased from the Bishop of Durham several cows, and a bull of the Teeswater or some English breed, all of a brown color, spotted with white ; and his lordship kept them sometime at his seat in Berwickshire. Bruce Campbell,





Esq., then factor on his lordship's estates in Ayrshire, carried some of that breed to Sornbeg in Kyle, where they were kept some time, and their progeny spread over different parts of Ayrshire. A bull of that stock, after coupling with many cows on the estate of Cessnock, was by Mr. Campbell sold to John Hamilton, Esq., of Sundrum, and raised a numerous offspring in that quarter of Ayrshire.

John Orr, Esq., of Borrowfield, about the year 1767, sent from Glasgow, or from some part in that neighborhood, to his estate of Grougar, Ayrshire, several fine milk-cows of a much larger size than any then on that estate. One of these cost six pounds, which was more than twice the price of the best cows then in that quarter. As these cows were well fed, they yielded a good return in milk, and the farmers in that neighborhood were eager to procure their calves, in hopes of obtaining similar returns. Cattle of the same appearance were about that time brought to Eglinton, Loudon, and to the seats of other noblemen and gentlemen in Ayrshire: and as most of those were of the same color, brown, spotted or freaked with white; as all of them were larger, and when duly fed yielded much more milk than the native breed,—their calves were reared by such as could procure them, and bulls of that breed, or even of their color, were preferred to all others. From these, or from crosses of them with the native cows, the whole district has been stocked; and the breed has attained such celebrity, that they have not only supplied the counties of Ayr, Renfrew, and greatest part of Lanark, but, for about twenty years past, colonies of the improved breed have been carried from Ayrshire to every county of Scotland and to many counties of England.

HISTORY OF THE AYRSHIRE BREED OF CATTLE.*

BY THE LATE SANDFORD HOWARD.

January 1, 1863.

The breed of cattle now known as the Ayrshire undoubtedly originated in the county of that name in Scotland, but by what special means it was formed cannot be particularly told. Youatt (1835) says: "A century ago there was no such breed in Ayrshire or in Scotland" and he asks, "did the [present] Ayrshire cattle arise entirely from a careful selection of the native breed?" adding, "If they did, it is a circumstance unparalleled in the history of agriculture. The native breed may be ameliorated by careful selection; its value may be incalculably increased; some good qualities may for the first time be developed: but yet there will be some resemblance to the original stock." A comparison of the modern breed with the description given by Aiton of the cattle which he says occupied Ayrshire fifty years before the time when he wrote (1806), will show that the difference is great. He says: "The cows kept in the districts of Kyle and Cunningham [districts of Ayrshire] were of a diminutive size, ill-fed, ill-shaped, and they yielded but a scanty return in milk; they were mostly of a black color, with stripes of white along their chine or ridge of their backs, about their flanks, and on their faces. Their horns were high and crooked, . . . their pile [hair] was coarse and open, and few of them yielded more than three or four Scotch pints [six to eight wine quarts] of milk a day."

Those who are acquainted with the Ayrshire cattle of to-day will readily admit that they present a wide contrast with the old stock, according to the above description of the latter; and the suggestion of Youatt,

*Published in Vol. I, Herd Record of the Association of Breeders of Thoroughbred Neat Stock, Ayrshire.

that the present breed could not have arisen entirely by selection from the old, seems reasonable. It follows, then, that the Ayrshire, like the modern or "improved" Shorthorn breed, originated in crossing. The question as to the breeds from which it was derived will be briefly considered, although the attempt will not be made to give precise details on this point,

Various accounts represent that the Earl of Marchmont, some time between 1724 and 1740, introduced to his estates, in Berwickshire, some cattle, conjectured (their history was not positively known) to be of the Holderness or Teeswater breed; and that, not long afterwards, some of the stock was carried to estates belonging to the same Nobleman, in that part of Ayrshire called Kyle. But perhaps the main nucleus of the improved breed was the "Dunlop stock," so called, which appears to have been possessed by a distinguished family by the name of Duniop, in the Cunningham district of Ayrshire, as early as 1780. This stock, was derived, it is said, at least in part, from animals imported from Holland. The Dunlop cows soon became noted. Rawlin (as quoted by Youatt), who wrote in 1794, speaking of the cattle of Ayrshire, says: "They have another breed, called the Dunlop, which are allowed to be the best race for yielding milk in Great Britain or Ireland, not only for large quantities, but also for richness and quality." This, though extravagant praise, perhaps, shows that the stock possessed remarkable qualities at that early day. It was, indeed, held in great esteem still earlier. In Youatt's treatise, it is mentioned, when speaking of the cattle of Dumfriesshire, that the poet Burns, when he occupied a farm near the city of Dumfries, "not content with the Galloway breed, introduced some of the west-country cows, which he thought would produce more milk." In the poet's published

correspondence, allusion is made, in a letter dated Nov. 13, 1788, to a heifer which had been presented to him by the proprietor of Dunlop House, as "the finest quey in Ayrshire." Mrs. Dunlop, it will be remembered, was a special friend and correspondent of the poet.*

Colonel Le Couteur, in a paper on the Jersey or Alderney cow, published in the Journal of the Royal Agricultural Society, refers to a statement by Quayle, that the Ayrshire was a cross of the Shorthorn and Alderney; and adds himself that "there is a considerable affinity between the two breeds." Rawlin also says, in reference to the Ayrshire breed: "It is said to be a mixture by bulls brought from the Island of Alderney with their own or the old race of cows." Martin says: "At some period or other there has evidently been a cross with the Durham or Holderness, and perhaps also with the Alderney." Professor Low, in his "Illustrations of British Quadrupeds," says: "From all the evidence which, in the absence of authentic documents, the case admits of, the dairy breed of Ayrshire cows owes the characters which distinguish it from the older race to a mixture of the blood of the races of the continent and of the dairy breed of Alderney."

So far the authorities quoted have doubtless given the main facts in regard to the originals of the present Ayrshire cattle. But there is evidence that the present leading type of the breed was formed, in part, by an infusion of the blood of the Kylvie, or West Highland

*As a further explanation of the preference given by Burns for the "west-country cows," the writer would mention that, in 1858, he had several interviews with the poet's sister, the late Mrs. Begg, of Ayr, in one of which she stated that her brother, during his occupancy of the farm of Ellisland, near Dumfries, kept a dairy, and made considerable quantities of cheese. Thus his efforts to procure the Ayrshire cow shows that they had, even at that time, a high reputation for this object.

breed. This appeared, in the first instance, probably, in what has been called the Swinley variety. The facts, which the writer has obtained in Scotland in regard to it, are substantially as follows : Theophilus Parton, of Swinley farm, near Dalry, Ayrshire, about forty to forty-five years ago took great pains to establish a herd of what were deemed the *best* Ayrshire cattle, into which he infused a strain of the West Highland blood, the particular degree of which is not publicly or generally known. The Swinley stock differs from the older Ayrshire in having a shorter head, with more breadth across the eyes, more upright and spreading horns, more hair, and generally better constitutions. They are also somewhat smaller boned than the old stock, though, from their superior symmetry and greater tendency to fatten, they are fully equal to the former in weight of carcass when slaughtered.

The following points, given by the Ayrshire Agricultural Association, 1853, "as indicating superior quality," will give an idea of the standard for Ayrshire cattle, as recognized by the leading breeders :—

Head short, forehead wide, nose fine between the muzzle and the eyes, muzzle moderately large, eyes full and lively, horns widely set on, inclining upwards and curving slightly inwards.

Neck long and straight from the head to the top of the shoulders, free from loose skin on the underside, fine at its junction with the head, and the muscles symmetrically enlarging towards the shoulders.

Shoulders thin at the top, brisket light, the whole forequarter thin in front, and gradually increasing in depth and width backwards.

Back short and straight, spine well defined, especially at the shoulders, short ribs arched, the body deep at the flanks, and the milk veins well developed.

Pelvis long, broad, and straight; hook [or hip] bones wide apart, and not much overlaid with fat; thighs deep and broad; tail long and slender, and set on a level with the back.

Milk-vessel [udder] capacious, and extending well forward, hinder part broad, and firmly attached to the body, the sole or under surface nearly level. The teats from two to two and a half inches in length, equal in thickness, and hanging perpendicularly; their distance apart at the sides should be equal to about one-third the length of the vessel, and across to about one-half the breadth.

Legs short, the bones fine and the joints firm.

Skin soft and elastic, and covered with soft, close, and woolly hair.

The colors preferred are brown, or brown and white, the colors being distinctly defined. Weight of the animal, when fattened, about forty imperial stones, sinking the offal (that is 560 pounds), the quarters or meat only.

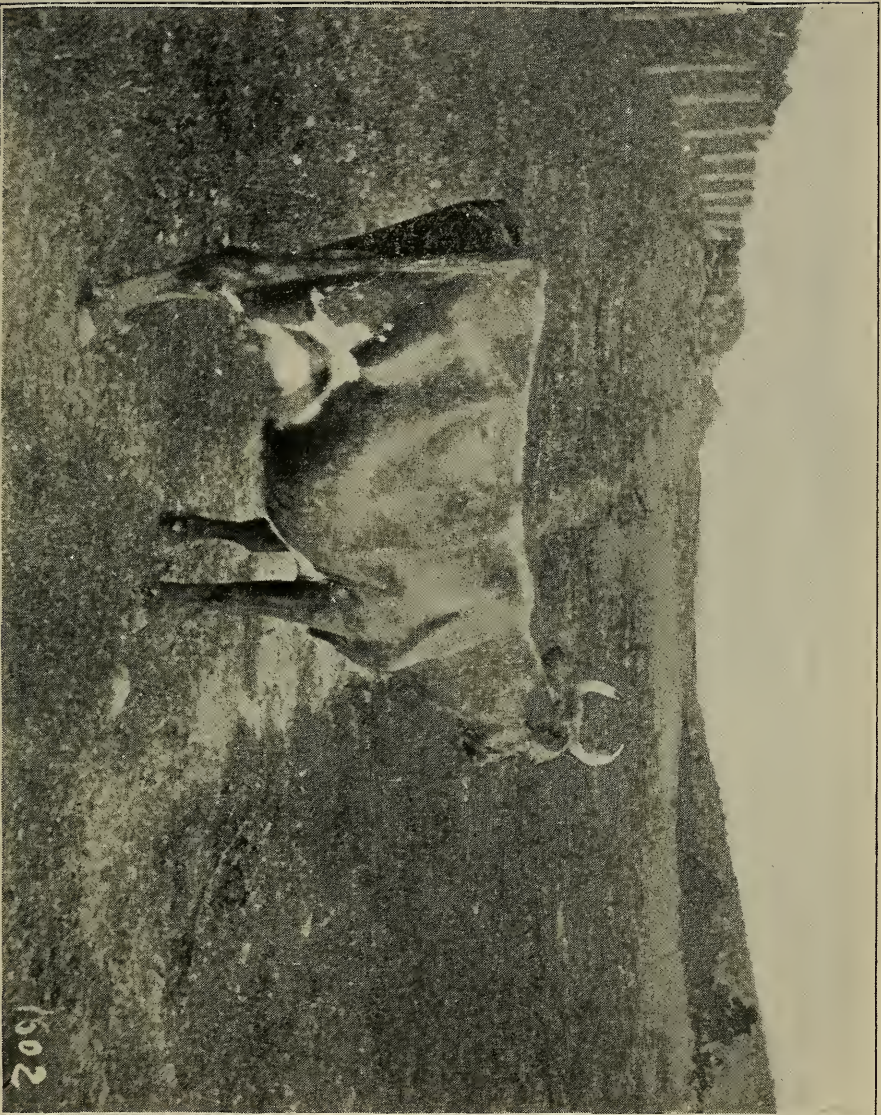
From what has already been said, it will be understood that the dairy is the leading object with the breeders of Ayrshires. At the same time, the fact has not been overlooked that to breed and perpetuate a profitable dairy stock, regard must be had to hardiness and strength of constitution, and also to such fattening tendencies as will insure a profitable return from calves fattened for veal, from steers reared for beef, and for cows which, having served their turn in the dairy, are at last dried of their milk, and prepared for the shambles. The importance of these properties is not sufficiently regarded by keepers of dairy stock in this country. The remark has not unfrequently been heard that the "*looks* of a cow are nothing." People who hold this absurd notion will never be distinguished for breeding profitable dairy stock. Even if milk were the

sole object, it would be impossible to preserve a breed possessing superior qualities, in this respect, without giving attention to those points of form which denote strength of constitution. It has been well observed by Magne, that, in the breeding of dairy stock, we should “make choice only of animals possessing the *twofold character of general vigor, and activity of the mammary system.*”

The leading breeders of Ayrshire, in Scotland, have followed these principles to some extent, if not to the full degree to which they should be observed. Hence they claim a high rank for the breed in reference to general usefulness. Aiton, speaking of what the Ayrshire cow would do, says: “She yields much milk, and that of an oily or butyraceous or caseous nature, and after she has yielded very large quantities of milk for several years, she will be as valuable for beef as any other breed of cows known; her fat shall be much more mixed through the whole flesh, and she shall fatten faster than any other.” Whatever may be said in regard to the extent of these claims, it will be admitted that they indicate the confidence which was long ago placed in the breed in regard to the properties mentioned. Youatt, who wrote twenty-five years after Aiton, says: “The breed has been much improved since Mr. Aiton described it.” It is thirty years since Mr. Youatt made this remark, and in this time the breed has been still further improved in reference to general usefulness. I have been assured by some of the most experienced breeders in Scotland that, while nothing has been lost on the score of dairy properties, considerable has been gained in hardiness and thrift, and in the faculty of giving a greater return, both in milk and flesh, for the food consumed. Of course it is the return obtained, in proportion to the food eaten, that constitutes the true criterion of value in all animals.

In Scotland, the calves of the Ayrshire breed that are not wanted for keeping up the breeding or dairy stock are either fattened for veal or turned for beef at an early age. The larger portion, perhaps, of the males are killed for veal. In fact, in some districts veal is an article of considerable importance, and the ability of Ayrshire cows to make fat calves is considered one of the excellencies of the breed. Thus, Haxton observes: "For all medium soils and climates throughout the United Kingdom, there is no breed equal to the Ayrshire for profit, whether the produce is converted into cheese, butter, or *veal*." A portion of the males are castrated and fattened when about three to three and a half years old. Scotch farmers, who are in the practice of fattening stock of various breeds, assured me that Ayrshire steers of this age fattened to as much profit as any, reaching the weight of 700 to 800 pounds the four quarters, and afforded beef excelled in quality only by the Galloways and the West Highlanders.

At present the Ayrshire cattle have not been tried in America to a great extent. There have been various importations, mostly made within the last twenty years; and so far as there have been such trials as would justify a conclusion in regard to their merits, they have answered all reasonable expectations. The leading object in keeping them here is the same as it is in Scotland,—the dairy; but their ability to fatten readily and make beef of good quality should be taken into consideration in estimating their value. In regard to the latter property, but few trials have as yet been made here. Most of the males have been kept for bulls, and the females have seldom been fattened till too far advanced in years to breed. It may be worthy of consideration, whether it would not be an object to give some good steers of the breed a fair chance to show what they could make in beef at three to four years old.



Maid Douglas, 11529.

25. 10. 07.



ROSE OF SHIMER'S PARK #14580

It is also desirable to ascertain what are the capabilities of the breed in regard to the performance of labor. On this point we are without any evidence from abroad, as oxen are not worked in Scotland. The results of the few trials that have been made with full-bloods have been highly favorable in reference to the qualities of the breed for this purpose. Judging by their points, there is no reason why Ayrshire oxen should not be equal to any others of their size for any kind of labor. They have clean, firm legs, well placed muscles, and are remarkably quick walkers.

The advantages of a Registry, or Herd Book, for this breed of cattle, are too obvious to require argument. For the Shorthorns, Herefords, and Devons registers have been prepared, and the benefits which have been derived therefrom are such as will insure their continuance. An accurate record of the pedigrees of animals, together with a record of such premiums as they may have taken, cannot fail to afford a guide to the breeder, in breeding with reference to special objects; the principle that "like begets like" being admitted as a general law. The subject of publishing a Herd Book for Ayrshires, in Scotland, has been agitated on several occasions, but down to the present time no direct action has been taken on it. The enterprise of the American breeders of this variety of cattle, in taking the lead in this matter, is highly creditable, and, if properly followed up, will be sure to bring a just recompense of reward.

AYRSHIRE CATTLE.

C. M. WINSLOW.

I am occasionally inquired of by persons unacquainted with Ayrshire cattle: "Are Ayrshire cows profitable cows for a milkman?" "What are they for butter cows?" "Are they quick growing, and do they make good beef cattle?" "What kind of a cross are they on Jerseys?"

I will try to answer the above questions in the following article:

AYRSHIRES FOR THE MILKMAN.

All the breeds of cattle that are of any special value show a tendency to excel in some one line of product, and, while they may be pretty good in several, are extra good in one definite line.

If I were asked to give my personal opinion of the place where an Ayrshire cow would do her best and be the most profitable to her owner, I should say in supplying milk for retail trade in towns and cities, because she is a medium sized cow which is acknowledged to be the size best adapted to economical production. She is a tough, hardy cow, seldom having anything ail her, either in body or udder. She has a vigorous appetite, not at all dainty in her food, eating with a relish whatever is placed before her, good or poor.

She is a rapid feeder and soon gets her fill and goes to chewing her cud, which she is always doing in a very rapid manner even while being driven along the road, and I have often seen them when being started into a run, keep on chewing as they ran.

If there is any food in the pasture, either good or poor grass, browse, or weeds, the Ayrshire cow will find it and get her fill.

She is a very uniform and persistent milker, drying off slowly and milking well up to calving.

She is quiet and pleasant in her disposition, if kindly treated or if let alone, but will resent abuse. She is intelligent, quick to learn and of a retentive memory. Can easily be taught to take the same place in a stable and will always go to that place until moved to another. She is not easily disturbed at milking time, pays no attention to noise and gives her milk as readily to one milker as another. She is a very economical producer of milk, giving a large amount of good quality for the food consumed. Official tests have shown her to produce 4 per cent. milk at a cost of less than two cents per quart on an average.

The milk itself is particularly adapted to the various requirements of the trade. It is produced at a small cost, is of good quality for inspection, has a good body to it and never looks blue, has good keeping quality and will bear transportation without churning or souring. Will, after standing over night, easily remix the cream into the milk, and when once remixed will not readily rise again. The milk is particularly adapted to table use and for food for invalids and children, being attractive looking and evenly balanced in casein and butter fat, making it a complete food and easily digested. Another peculiar quality of the Ayrshire milk is that the curd instead of being leathery and tough is easily crumbled to pieces, which renders it much more easily digested.

There is no milk so healthy as Ayrshire milk, and people with weak digestive organs, and young children, thrive on it and are uniformly free from stomach and intestinal troubles.

I have just received the report of the Vermont Experiment Station for 1899, where they have a herd of

39 Jersey, and high grade Jersey, and three Ayrshire cows. The report shows an average of 5296 pounds of milk for the 42 cows, and an average of 6879 pounds for the Ayrshires. The average cost of 100 pounds of milk for the whole herd is 93.4, and for the Ayrshires 64.5, which would make the Ayrshire milk cost a fraction over 1 1-2 cents per quart. They state that the cost of milk is from the cost of food laid down in the barn, but that the roughage is rated at prices more than high enough to cover cost of raising and harvesting in average seasons.

BUTTER.

While the Ayrshire seems by nature adapted to the production of milk to be used on the table and for food in its original form, still she is no mean butter cow, her milk being rich in butter fat, but as the cream rises slowly it is much more profitable to use a separator, for, with a separator the cream is as readily extracted from Ayrshire milk as from any other, and there is no noticeable difference in the churnability of Ayrshire cream from that of any of the butter breeds.

The report of the Vermont Experiment Station for 1899, just received, with a herd of 39 registered and high grade Jerseys and three Ayrshires, gives the average cost of one pound of butter for the whole herd at 15.6 cents, and 14.7 cents for the Ayrshires, making the Ayrshires produce both milk and butter at a less cost than the Jerseys.

The average proceeds from the sales of butter from the whole herd was \$80.55, and from the Ayrshires \$77.71. While the average of the Ayrshires for butter fell below the Jerseys \$2.84, they averaged 1583 pounds more milk, which for feeding purposes would more than offset the \$2.84 less butter, making the Ayrshire the

more profitable as a butter cow taking the extra milk into consideration.

At this same Station, a few years ago, an Ayrshire cow, Rena Myrtle, made a record of 12172 pounds of milk and 546 pounds of butter in one year, being the largest yield made at the Station by any cow of any breed.

My opinion is, that next to supplying milk for the trade the Ayrshire cow is particularly adapted to supplying sweet cream for the trade because she gives a large quantity of smooth, even, cream that is superior for table use and for the manufacture of ice cream.

BEEF.

We do not claim the Ayrshire to be a beef animal or even a general purpose cow, but as she is of fair size and an easy keeper, she will pay the cost of raising whenever it is desired to turn her into beef. She has heavy hind quarters and thick loins, and her meat is nicely flecked with tallow even as a two year old.

The steers, pure bred and grades, mature early and are of fair size, and are as profitable for beef as it is possible for a dairy breed to be.

I have seen Ayrshire oxen and they appeared to be good ones. They were of fair size, handsome looking and sprightly, and were said to be tough and enduring.

TOP CROSS ON JERSEYS.

A favorite cross seems to be that of an Ayrshire bull on high grade Jerseys, the result of which appears to produce a cow larger than the Jersey with more hardiness, not so nervous as the pure bred Jersey, giving more milk, and making a good all-round dairy cow.

This cross began to be tried several years ago and there is a continual call for Ayrshire bulls for this purpose.

CONSTITUTION.

PREAMBLE.

We, the undersigned, breeders of Ayrshire cattle, recognizing the importance of a trustworthy Herd Book that shall be accepted as a final authority in all questions of Pedigree, and desiring to secure the co-operation of all who feel an interest in preserving the purity of this stock, do hereby agree to form an Association for the publication of a Herd Book, and for such other purposes as may be conducive to the interests of Breeders, and adopt the following Constitution :

ARTICLE I.

This Association shall be called The Association of Ayrshire Breeders.

ARTICLE II.

The members of the Association shall comprise only the original signers of this Constitution, and such other persons as may be admitted, as hereafter provided.

ARTICLE III.

The officers of the Association shall consist of a President, four Vice - Presidents, a Treasurer, a Secretary, who, together with six members of the Association, all chosen by ballot, shall constitute an Executive Committee.

The President, Vice-Presidents, Treasurer and Secretary shall be elected annually.

The six members who make up the balance of the Executive Committee shall be elected as follows: Two members for one year; two members for two years, and two members for three years, and hereafter two members shall be elected each year for a term of three years.

The Treasurer shall present at the annual meeting of the Association a full statement of his accounts, audited by two members of the Association, appointed by the Executive Committee.

The Executive Committee shall, under the general direction of the Association, prescribe the manner in which the business of the Association shall be conducted; shall have general control of all matters pertaining to its interests; shall have authority to appoint an Editor of the Herd Book, and may fill any vacancies occurring among the officers. The office of Secretary, Treasurer, and Editor may be filled by the same person.

The Treasurer, Secretary, and Editor shall receive compensation for their services, to be fixed by the Association. The Treasurer shall give such bonds as may be required by the Executive Committee.

ARTICLE IV.

The annual meeting of the Association shall be held each year, at such time and place as shall be designated by the Executive Committee (of which notice shall be sent to members at least one month previous), for the discussion of questions of interest to the members, and for the election of officers for the ensuing year. Special meetings of the Association may be called by the President or by the Executive Committee or at the written request of ten members. 'Twenty days' notice must be given and the object of the meeting announced in the call, and no business other than that specified in the call shall be transacted at the special meeting. Time and place shall be determined in same way as annual meeting.

At all meetings of the Association members may vote in person, or by proxy, or they may send their ballots by mail to the Secretary, whose duty it shall be to vote the same and to acknowledge their receipt. At

least twenty members present, represented by proxy, or written ballot, shall be a quorum for transacting business.

ARTICLE V.

Only breeders of Ayrshire cattle shall be eligible for membership, and members shall be elected at any regular meeting of the Association ; also by the unanimous written consent of the Executive Committee at any time between the annual meetings, subject to the following conditions :

Each applicant for membership shall be recommended by one or more members of the Association, as a trustworthy and careful breeder ; and no new member shall be admitted if objected to by any officer of the Association.

The Secretary shall notify the candidate of his rejection, or in case of his election that he will be admitted as a member on signing the Constitution and paying the initiation fee.

An applicant who has been rejected shall not be voted on again until two years from the date of his rejection, unless by the unanimous consent of the officers of the Association.

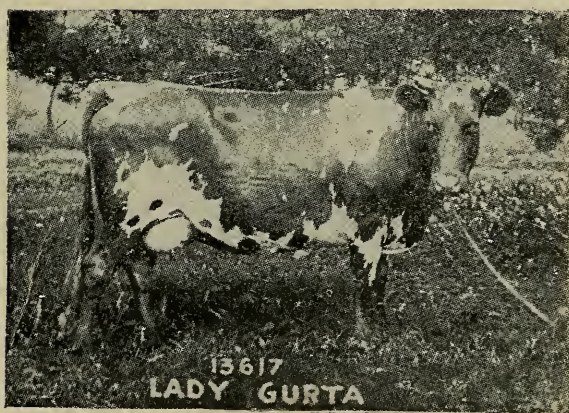
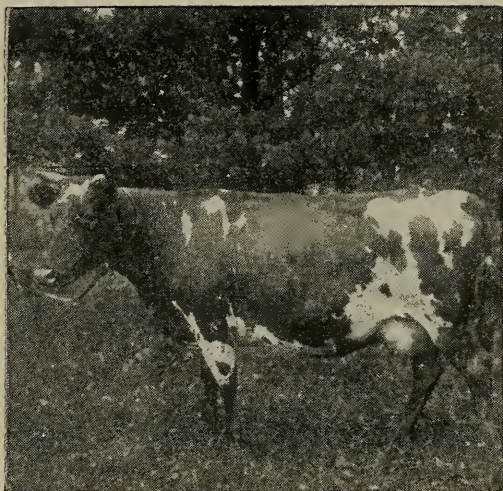
ARTICLE VI.

Each member shall pay an initiation fee of twenty-five dollars. These fees shall constitute an Association Fund to defray the expenses of publishing the Herd Book, and other charges incidental to the organization of the Association and to the transaction of its business.

No officer or member shall be authorized to contract any debt in the name of the Association.

ARTICLE VII.

The Herd Book shall be edited by an Editor appointed for that purpose, under the control and





GENERAL OF SHIMERS PARK #6174

supervision of the Executive Committee, and shall be published only with its official approval.

The charge for entry of the Pedigree of each animal belonging to a member of the Association shall be fixed by the Executive Committee, but shall not exceed one dollar, except for an animal two years old.

Animals not belonging to members of the Association may be entered in the Herd Book upon the payment of twice the amount charged to members.

The Herd Book charges shall be appropriated to the examination and verification of Pedigrees, and the preparation of the Herd Book, which shall be published by the Association and shall be its property. The price of the Herd Book shall be determined by the Executive Committee. The Editor shall keep on file all documents constituting his authority for Pedigrees, and shall hold them subject to the inspection of any member of the Association, and shall deliver them to his successor in office.

ARTICLE VIII.

Should it occur at any time that any member of the Association shall be charged with wilful misrepresentation in regard to any animal, or with any other act derogatory to the standing of the Association, the Executive Committee shall examine into the matter; and if it shall find there is foundation for such a charge, the offending member may be expelled by a vote of two-thirds of the members of the Association, present or represented, at any regular meeting.

ARTICLE IX.

This Constitution may be altered or amended by a vote of two-thirds of the members present or represented by proxy, at any annual meeting of the Association.

Notice of proposed alterations or amendments shall be given in the call for said meeting.

REGULATIONS.

1. Only such animals shall be admitted to the Herd Book as are proved to be either imported from Scotland or descended from such imported animals.

2. All animals hereafter imported, to be eligible to registry in the Ayrshire Record, must previously be recorded in the Ayrshire Herd Book of Scotland, and an application for registry must be accompanied by a certificate of registry duly signed by the Secretary in Scotland.

Entries of calves imported in dam must be accompanied by the certificate of registry of sire and dam in the Scotch Herd Book, also certificate of bull service, signed by owner of bull.

3. No animal not already named and entered in some Herd Book at this date, shall be accepted for entry under a name that has already been offered for entry ; also, the affix, 1st, 2d, and 3d, shall apply only to calves of the cow bearing the name used ; not to her grandchildren, nor any other animal.

4. The breeder of an animal shall be considered the one owning the dam at the time of her service by the bull.

5. No Pedigree will be received for entry from anyone except the breeder of the animal offered, unless it is accompanied by a certificate of the breeder or his legal representative, indorsing the Pedigree.

Entries of calves, sired by bulls not owned by the breeder of the calf, shall be accompanied by a certificate of bull service signed by owner of bull.

6. All animals sold, in order that their progeny may be registered, must have their successive transfers duly recorded. Records of transfers will be made only on the certificate of former owner, or his legal representative.

7. A transfer-book shall be kept by the Editor, in which all changes of ownership shall be recorded.

8. The Editor shall keep a record of the deaths of all animals which may be sent to him. (And breeders are requested to forward the same, stating cause, etc.)

9. The fees for recording are one dollar for each animal recorded by and in the name of a member of the Association, being either bred or owned by him, and two dollars for animals over two years old at the time of entry.

Double the above rates are charged to those not members.

A fee of twenty-five cents will be charged for recording ancestors necessary to complete a pedigree to importation or to cattle already in the Ayrshire Record.

Transfer fee twenty-five cents. All the above fees should accompany the entry or transfer papers to insure attention.

10. An individual membership shall be continued after the death of a member in the settlement of his estate until the same shall be settled and then the membership shall cease. In case of corporations, the corporation may continue as a member so long as they are interested in the Association, and shall be represented by such person as may be designated by the President and Secretary of the Corporation.

11. These Regulations may be altered, amended or added to, with the consent of two-thirds of the officers of the Association and Executive Committee.

PRICE OF BOOKS.

Each Vol., I to XII inclusive, postage prepaid, may be obtained of the Treasurer, N. S. Winsor,	
Greenville, R. I., price,	\$2.25
Milk record blanks, per 100,	1.50
Blanks for registering and transfer blanks, free,	
on application to Secretary.	

CHARTER.

An Act to Incorporate the Ayrshire Breeders' Association.

It is hereby enacted by the General Assembly of the State of Vermont;

SEC. 1. J. D. W. French, James F. Converse, Alonzo Libby, F. H. Mason, Obadiah Brown, Henry E. Smith, C. M. Winslow, S. M. Wells, H. R. C. Watson, James Scott, George A. Fletcher, Charles H. Hayes, John Stewart, their associates and successors, are constituted a body corporate by the name of the "Ayrshire Breeders' Association," and by that name may sue and be sued; may acquire by gift or purchase, hold and convey real and personal estate, necessary for the purpose of this corporation, not to exceed twenty-five thousand dollars; may have a common seal and alter the same at pleasure.

SEC. 2. The object of this corporation shall be to publish a herd book, and for such other purposes as may be conducive to the interest of breeders of Ayrshire cattle.

SEC. 3. This corporation may elect officers and make such by-laws, rules and regulations for the management of its business as may be necessary, not inconsistent with the laws of this State.

SEC. 4. This corporation may hold its meetings at such time and place as the corporation may appoint.

SEC. 5. This act shall take effect from its passage.

JOSIAH GROUT,

Speaker of the House of Representatives.

LEVI K. FULLER,

President of the Senate.

Approved November 23, 1886.

EBENEZER J. ORMSBEE,

Governor,

(A true copy.)

Attest: E. W. J. HAWKINS,

Engrossing Clerk.

SCALE OF POINTS OF AYRSHIRE BULL.

(ADOPTED FEBRUARY 21, 1889.)

The points desirable in the female are generally so in the male, but must, of course, be attended with that masculine character which is inseparable from a strong and vigorous constitution. Even a certain degree of coarseness is admissible ; but then it must be so exclusively of masculine description as never to be discovered in a female of his get.

1. The head of the bull may be shorter than that of the cow, but the frontal bone should be broad, the muzzle good size, throat nearly free from hanging folds, eyes full. The horns should have an upward turn, with sufficient size at the base to indicate strength of constitution..... 10
2. Neck of medium length, somewhat arched, and large in the muscles which indicate power and strength 10
3. Forequarters—shoulders close to the body, without any hollow space behind ; chest broad, brisket deep and well developed, but not too large..... 7
4. Back short and straight ; spine sufficiently defined, but not in the same degree as in the cow ; ribs well sprung, and body deep in the flanks..... 10
5. Hindquarters—long, broad and straight ; hip bones wide apart ; pelvis long, broad and straight : tail set on a level with the back ; thighs deep and broad..... 10
6. Scrotum large, with well developed teats in front..... 7

7.	Legs, short in proportion to size, joints firm. Hind legs well apart, and not to cross in walking	5
8.	Skin yellow, soft, elastic, and of medium thickness.....	10
9.	Color, red of any shade, brown or white, or a mixture of these—each color being distinctly defined	3
10.	Average live weight at maturity, about 1,500 pounds.....	10
11.	General appearance, including style and movement.....	15
12.	Escutcheon, large and fine development.....	3
Perfection.....		100

SCALE OF POINTS AYRSHIRE COW.

(ADOPTED FEBRUARY 21, 1889.)

The following scale of points for the Ayrshire cow was adopted—being similar to the scale adopted in Scotland in 1884, and changed in a few points to render them applicable to this country.

1. Head, short ; forehead, wide ; nose, fine between the muzzle and eyes ; muzzle, large ; eyes, full and lively ; horns, wide set on, inclining upwards..... 10
2. Neck, moderately long, and straight from the head to the top of the shoulder, free from loose skin on the under side, fine at its junction with the head, and enlarging symmetrically towards the shoulders..... 5

3.	Forequarters — shoulders, sloping ; withers, fine ; chest, sufficiently broad and deep to insure constitution ; brisket and whole forequarters light, the cow gradually increasing in depth and width backwards.....	5
4.	Back, short and straight ; spine, well defined, especially at the shoulders ; short ribs, arched ; the body deep at the flanks.....	10
5.	Hindquarters, long, broad and straight, hookbones wide apart, and not overlaid with fat ; thighs, deep and broad ; tail long, slender and set on a level with the back.....	8
6.	Udder, capacious and not fleshy, hind part broad and firmly attached to the body, the sole nearly level and extending well forward ; milk veins about udder and abdomen well developed ; the teats from 2 1-2 to 3 inches in length, equal in thickness—the thickness being in proportion to the length—hanging perpendicularly, their distance apart at the sides should be equal to one-third of the length of the vessel, and across to one-half the breadth.....	30
7.	Legs, short in proportion to size, the bones fine, the joints firm.....	3
8.	Skin, yellow, soft and elastic, and covered with soft, close, woolly hair	5
9.	Color, red of any shade, brown or white, or a mixture of these—each color being distinctly defined	3
10.	Average live weight, in full milk, about 1000 pounds.....	8
11.	General appearance, including style and movement.....	10
12.	Escutcheon, large and fine development.....	3
	Perfection..	100

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Doane, Franklin	Middletown, N. Y.
Doe, Charles C	South Newbury, Vt.
Dorne, Elmer J... ..	Johnstown, N. Y.
Drew, L S	South Burlington, Vt.
Drummond, James.....	Cote Visitation, Montreal
Dunham, J L.....	Sharon, Conn.
Edes, Samuel.....	Newport, N. H.
Ennis, Alfred A.....	Danielson, Conn.
Fairweather, William.....	Meadville, Pa.
Farley, F C.....	Milburn, N. J.
Farrell, W E	Corey, Pa.
Fletcher, George A.....	Milton, Mass.
Fletcher, Etna J... ..	Greenfield, N. H.
Foote, T L.....	Lee, Mass.
*Foss, J M.....	St. Albans, Vt.
French, J D W.....	North Andover, Mass.
Fuller, C C.....	Nelson, Ohio.
Garvin, W R.....	Dover, N. H.
Gibb, John L.....	Quebec, P. Q.
Gold, T S.....	West Cornwall, Conn.
Greene, B D.....	Stamford, Conn.
Griffin, J H.....	Moir, N. Y.
Hall, Lott	Gouverneur, N. Y.
Ham, Eugene... ..	Verbank, N. Y.
Hamilton Woolen Co.....	Southbridge, Mass.
Harrington, A D	Oxford, N. Y.
Harrington, H A.....	Worcester, Mass.
Harrison, Charles K	Pikesville, Md.
Harwood, J A.. ..	Littleton, Mass.
Haskins, J P & Son	Providence, R. I.
Hawes, Addison S.....	Providence, R. I.
Hawkes, E B.....	Wells Bridge, N. Y.
Hayes, Charles H.....	Portsmouth, N. H.

* Dead.

Hayes, Charles S	Portsmouth, N. H.
Hazard, Isaac	Providence, R. I.
Holt, Andy.....	Lyndeboro, N. H.
Hazen, Chester	Brandon, Wis.
Healy, C N	Exter, N. H.
Heath, G P.....	Northboro, Mass.
Higgins, Asa.....	Petaluma, Cal.
Hill, James J.....	St. Paul, Minn.
Hinson, W G.....	Charleston, S. C.
Hopkins, William H.....	Providence, R. I.
Hopkins, Willis W.....	Aldenville, Pa.
Hubbard, George D.....	Camden, N. Y.
Hunt, A W.....	Brunswick, Me.
Hyde, J B.....	120 Broadway, New York.
Irving, Thomas.....	Petite Cote, Que.
Jackson, Ward R.....	Boonville, N. Y.
Jay, Wm.....	Katonah, N. Y.
Jenkins, J W.....	Vernon, N. Y.
Johnson, Joseph.....	Hartland, Wis.
Jones, D & G.....	Galesburgh, Ill.
Jones, Ira W	Alfred, N. Y.
Jones, N P.....	Billerica, Mass.
Joslin, H S.....	Mohegan, R. I.
Kemp, Edward	New York.
Kissel, Gustave.....	Morristown, N. J.
Knowlton, George W.....	West Upton, Mass.
Krebs, J DeWitt.....	200 W 118—New York.
Larned, J H.....	Putnam, Conn.
Lawrence, James.....	Groton, Mass.
Leach, Philo.....	Bridgewater, Mass.
Libby, Alonzo.....	Westbrook, Me.
Lindsay, William	Elizabeth, N. J.
Logan, A Sydney.....	Philadelphia, Pa.
Lorillard, P.....	Jobstown, N. J.
Magie, J O.....	Elizabeth, N. J.

Magone, Daniel.....	Ogdensburgh, N. Y.
Mason, F H	Leon, Ohio.
Massey, D A	Asylum Station, Mass.
McCrea, Robert.....	Champlain, N. Y.
McFadden, George H.....	Bryn Mawr, Pa.
Merriam, Herbert.....	Weston, Mass.
Millard, L D.....	Taunton, Mass.
Miller, James.....	Pen Yan, N. Y.
Milliken, Charles R.....	Portland, Me.
Munce, R J.....	Washington, Pa.
Nichols, James H.....	Carmel, N. Y.
Norton, W H	Allentown, N. Y.
Oliver, James.....	South Bend, Ind.
Oneida Community (Limited)	Kenway, N. Y.
Ormiston Bros.....	Cuba, N. Y.
Peck, Cassius.....	Burlington, Vt.
Peck, C L.....	Coudersport, Pa.
Pierce, George H	Concord, Mass.
Perley, Charles	West Boxford, Mass.
Pierce, W R.	Middleborough, Mass.
Pike, Geo E.....	Gouverneur, N. Y.
Piper, Anson C.....	South Acton, Mass.
Pope, Rev G Stanley.....	Grand View, Texas.
Proctor, Fletcher D	Proctor, Vt.
Ramsdell, H S	Newburgh, N. Y.
Reed, Hammon.....	Lexington, Mass.
Reeve, C McC.....	Minneapolis, Minn.
Rhodes, T F	Camillus, N. Y.
Rhome, B C	Etna, Texas.
Robinson, Isaac R.....	Wakefield, R. I.
Roode, Joseph.....	Jewett City, Conn.
Russell, Henry G	Providence, R. I.
Sadler, Edward W.. ...	Mont Clair, N. J.
Sage, Charles D.....	No. Brookfield, Mass.
Sanford, Charles.....	Orwell, Vt.
Scott, Jonn W.....	Austin, Minn.

Schouten, E A	Cortland, N. Y.
Scribner, G S	Castleton, Vt.
Sears, B C	Blooming Grove, N. Y.
Sears, N E.....	Elmwood, Conn.
Seaver, Henry E	Canton, N. Y.
Sellers, William	Edge Moor, Del.
Sherman, Everett B.....	Burrillville, R. I.
Sherman, Leander	Harrisville, R. I.
Shimer, A S.....	Redington, Pa.
Shimer, B Luther	Bethlehem, Pa.
Smith, Daniel A.....	Tarkiln, R. I.
Smith, E A	Brandon, Vt.
Smith, J B	Walden, N. Y.
Smith, Oliver	Chateaugay, N. Y.
Smith, Peter D.	Andover, Mass.
Spaulding, L C	Poultney, Vt.
Spencer, A B.....	Rockport, Ohio.
Stevens, Wm Stanford....	St. Albans, Vt.
Stewart, John	Elburn, Ill.
Stewart, John Lorne	Island of Coll, Scotland.
Stickney, William H	Brownfield, Me.
Stone, Bela J	Westborough, Mass.
Stowell, L D.....	Black Creek, N. Y.
Stowits, H	Abilene, Kan.
Surget, James.....	Natchez, Miss.
Taber, George.. ..	East Aurora, N. Y.
Taylor, Alfred J.....	Worthington, Mass.
Taylor, John L	Oswego, N. Y.
Thorp, John C.....	Holyoke, Mass.
Thurber, C S.....	New York.
Tongue, Thomas H.....	Hillsborough, Oregon.
Topping, R R	Amsterdam, N. Y.
Tschudy, Fred.....	Monroe, Wis.
Tubbs, Ambie S.....	Mexico, N. Y.
Tucker, W G.....	Elm Valley, N. Y.

Turnbull, Thomas Jr.....	Monaca, Pa.
Turner, J C.....	Longview, Texas.
Tuttle, M A.....	Hornellsville, N. Y.
Underhill, C S.....	Glenham, N. Y.
Valentine, John R	Bryn Mawr, Pa.
Vaughn, Willam P..	Providence, R. I.
Venable, A R Jr	Farmville, Va.
Verplank, Samuel.....	Fishkill-on-Hudson, N.Y.
Viner, William.....	Arden, N. Y.
Walker, William I.....	Great Barrington, Mass.
Watson, H R C.....	Brandon, Vt.
Weed, John W.....	Noroton, Conn.
Wells, Dudley.....	Wethersfield, Conn.
Wells, S M.....	Wethersfield, Conn.
Whitney, C P	Orleans, N. Y.
Whittingham, W R.....	Milburn, N. J.
Wilson, A J.....	Grafton, Ohio.
Winslow, C M.....	Brandon, Vt.
Winsor, Nicholas S.....	Greenville, R. I.
Winter, N H.....	Cortland, N. Y.
Wolcott, C W.....	Readville, Mass.
Wood, Lucius H.....	Cranston, R. I.
Yeaton, George H.....	Dover, N. H.
Young, Gilman P.....	Grafton, Mass.
Young, James L.....	Sterling, Conn.

